

GRAIN DEALERS' NATIONAL CONVENTION AT NEW ORLEANS

THE AMERICAN ELEVATOR AND GRAIN TRADE



Entered as second-class matter June 26, 1885, at the Post Office at Chicago, Illinois, under Act of March 3rd, 1879.

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
Mitchell Brothers Publishing Co.

Vol. XXXII.

CHICAGO, ILLINOIS, OCTOBER 15, 1913.

No. 4.

One Dollar Per Annum.
SINGLE COPIES, TEN CENTS.

BELTING

RUBBER-LEATHER-COTTON-CANVAS

LONGEST SERVICE
LOWEST COSTS

W. H. Salisbury & Co., Incorporated

Belting Experts

Since 1855

CHICAGO, ILL.

GIVE US A TRIAL

Did It Ever Occur to You

That the best way to get what you want, and get it promptly, is to send your orders to people who have had experience in the business and who carry a stock of goods always ready for quick shipment? We have been in the Elevator and Mill Furnishing business over twenty-five years and feel that we know something about it. We carry in stock a complete line of supplies, including Testing Sieves, Transmission Rope, Belting, Steel Split Pulleys in sizes up to 54-inch, Elevator Buckets, Conveyor Chain Belting, Sprockets, Lace Leather, Scoops, Shafting, Collars, Bearings, etc., etc. Send us your orders. We will satisfy you.

THE

STRONG-SCOTT MANUFACTURING CO.

MINNEAPOLIS, MINN.

Northwestern Agents for The Great Western Mfg. Co., Richardson Automatic Scales, Invincible Cleaners, Knickerbocker Dust Collectors

Consign your Grain and Field Seeds to

Somers, Jones & Co.

82 Board of Trade, CHICAGO

VAN LEUNEN SERVICE

— TRY IT —

YOUR

PAUL VAN LEUNEN
AND
COMPANY

SUCCESS

GINGINNATI O.

DECATUR, ILL.

Give Us Your Business

COURTEEN SEED CO.

MILWAUKEE, WISCONSIN

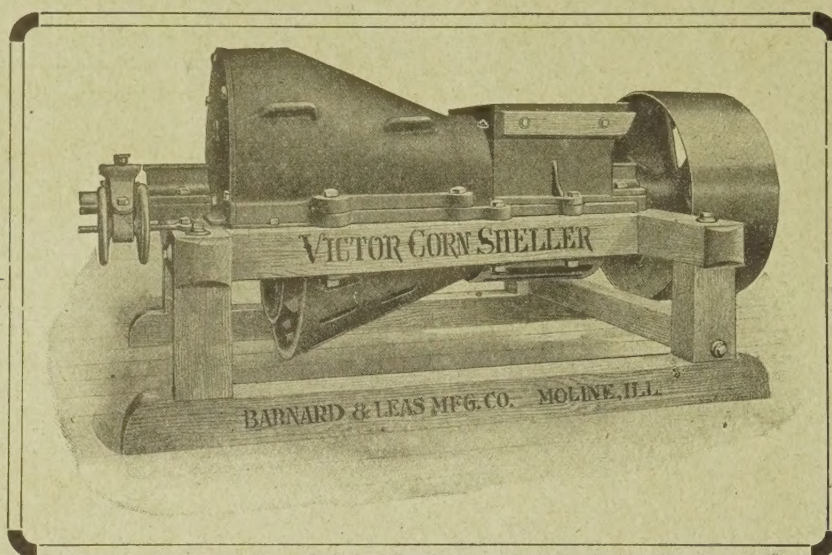
CLOVER and TIMOTHY

SEEDS

SPECIAL PRICES ON GRAIN BAGS

Write Us When Interested

A Valuable Pair



The Victor Corn Sheller is easily adjusted to all kinds and conditions of corn.

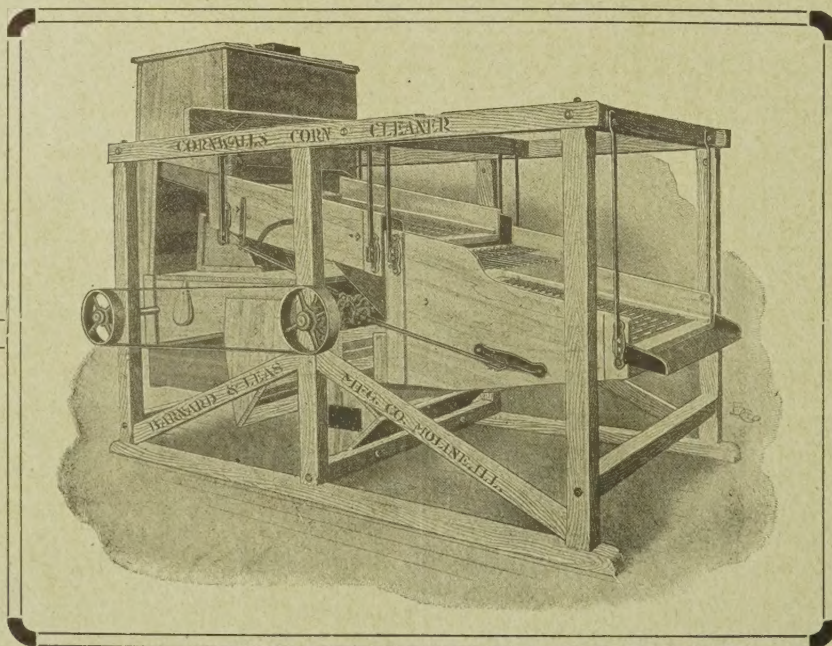
It is non-chokable, adjustable while running, and non-breakable.

It will handle more corn and do it easier with less cracking than any other sheller.

The Cornwall Corn Cleaner is the machine after which all the leading sieve corn cleaners were copied.

It was the first machine of its kind and has always led in quality and quantity of work.

Its patent finger screen cannot clog, but handles the corn and shucks easily at all times.



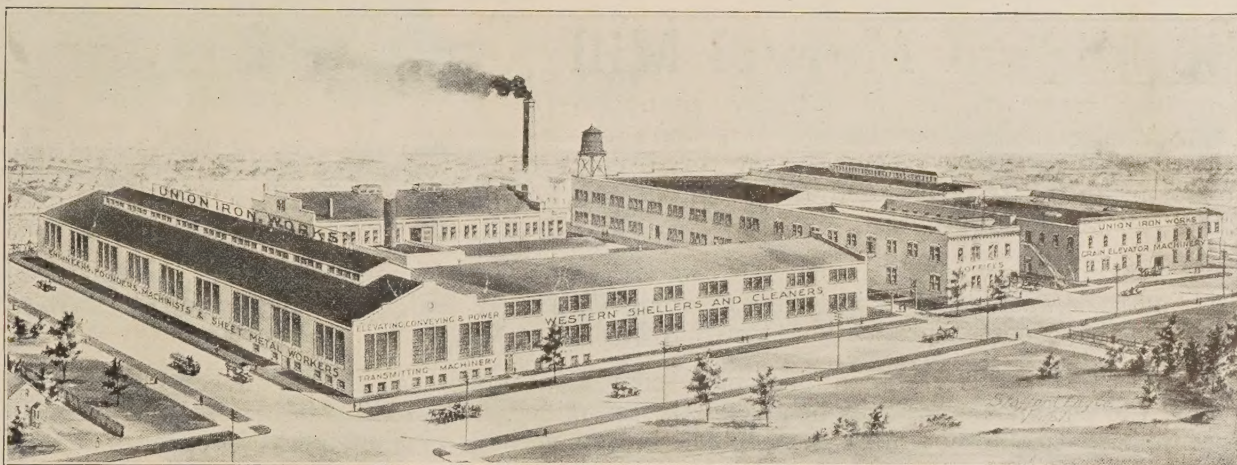
BARNARD & LEAS MFG. CO.

MILL BUILDERS AND
MILL FURNISHERS

ESTABLISHED 1860. MOLINE, ILLINOIS, U.S.A.

The WESTERN Line OF ELEVATOR AND MILL MACHINERY

Our success in the building of grain cleaning and grain handling machinery has paved the way for this extensive plant.



This plant is devoted exclusively to the manufacture of the famous WESTERN Line of Shellers, Cleaners and machinery for Mills and Elevators

Over Forty Years of Honest Business Success

Behind the name WESTERN on every Sheller and Cleaner stands an organization that for over forty years has been building *honest elevator and mill machinery* at *honest prices*. This honest purpose has achieved and sustained a reputation based on *actual* elevator and mill machinery merit, that in turn has created a business of impregnable financial permanence and stability.

The Factory

WESTERN machinery is built in one of the largest and best equipped factories in the world. This factory stands as a proof of the worth of WESTERN machinery. We occupy it today for just one reason—because WESTERN Shellers and Cleaners sold, stay sold. It means careful conscientious elevator and mill machinery building. It is your evidence of our permanence, prosperity and success.

The Western Shellers and Cleaners

Our success in building grain handling and grain cleaning machinery is the outgrowth of years of combined study, hard work and experience,

backed by sound business judgment. Only men of long successful experience and deep knowledge of mechanics and who know grain can design and construct machinery for handling and cleaning of grain so as to secure *simplicity, reliability* and *capacity*, at the same time insuring *durability* and *economy in operation*, which qualities have made WESTERN machinery famous the world over.

Your profits depend largely upon your facilities for handling grain and the condition it reaches the market. Thoroughly cleaned grain, with WESTERN Separators and Cleaners will raise the grade and bring a premium every time.

A WESTERN Book For You

We have prepared an interesting fact story about WESTERN grain handling and grain cleaning machinery and about our organization. You should read this booklet before choosing your new equipment. You will find therein ample proof of the worth of our Shellers and Cleaners, the honesty of the prices and the service behind them. Your copy is ready. Write for it today.

UNION IRON WORKS, Decatur, Ill., U. S. A.

There is nothing in WESTERN advertising that isn't in WESTERN machinery.

Success Lies in Your Opportunities

The Midget Marvel Mill

offers you a money-making opportunity, an opportunity that has spelled success for *progressive* elevator operators in nearly every state in the Union, an opportunity that has changed failure to success and built up wonderful profits.

Do you want to class yourself among the progressive operators who have grasped the opportunity of utilizing their waste time by installing a "Midget" Marvel Mill, furnishing their customers with better flour at less cost of production than they have been accustomed to heretofore?

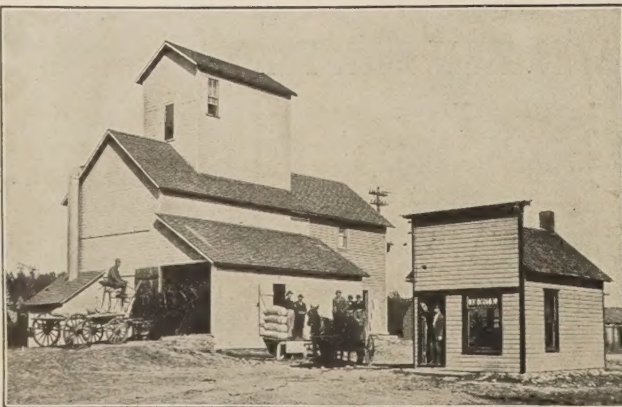
The "Midget" Marvel is a self-contained mill—compact, complete, efficient—and can be operated by one man who need not necessarily be an experienced miller. The "Midget" has replaced many long system mills that could not meet the competition on account of high operating expense or lack of power.

Sold on Trial. This is our Guarantee:

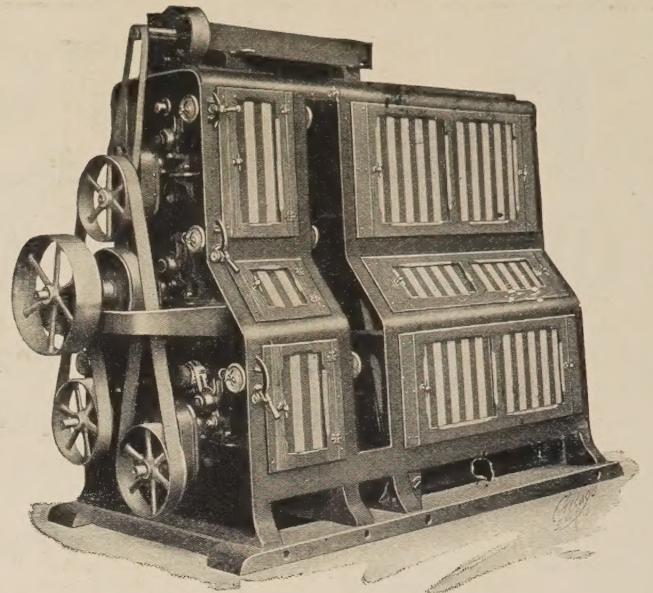
"We guarantee that the "Midget" Marvel Mill is just as represented; that we will replace any part free of charge that shall in one year from date of purchase prove defective either in material or workmanship; that it will make 42 pounds of good flour out of a bushel of wheat testing 58 pounds or better. We further guarantee the buyer complete satisfaction, and we leave it entirely with him to say whether the "Midget" Marvel comes up to our description and this guarantee. If for any reason the buyer wishes to return the mill during the first 30 days of operation, he can do so, and all the money he has paid to us for the machine will be cheerfully refunded."

Now, are you alive to a money-making proposition? Are you willing to be shown how to double your profits on your investment? Investigate. Don't take our word for it. We will furnish you a list of the nearest "Midget" installations in grain elevators. If you are not making as much money as you should, if you have time and power in your plant that is going to waste—find out about the "Midget."

THEIR BEST INVESTMENT



Jamestown, Kan., March 1, 1913.
Anglo-American Mill Co., Owensboro, Ky.
Gentlemen:—We want to say to you at this time that we consider the "Midget" Marvel the best investment we have ever made.
Respectfully,
GIFFORD BROS.



The "Midget" Marvel Self-Contained Roller Mill.
"A BETTER BARREL OF FLOUR CHEAPER"

No. 1. 25 Bbls. Capacity Per Day.
No. 2. 50 Bbls. Capacity Per Day.

A "Midget" Book for You

We have prepared an interesting fact story about flour and flour manufacturing profits, entitled "The Story of a Wonderful Flour Mill." You should read this if you would be wise. You will find therein ample proof of the money-making prospects with the "Midget" installed in your elevator, together with a proof of our argument. Your copy is ready. Write for it today.

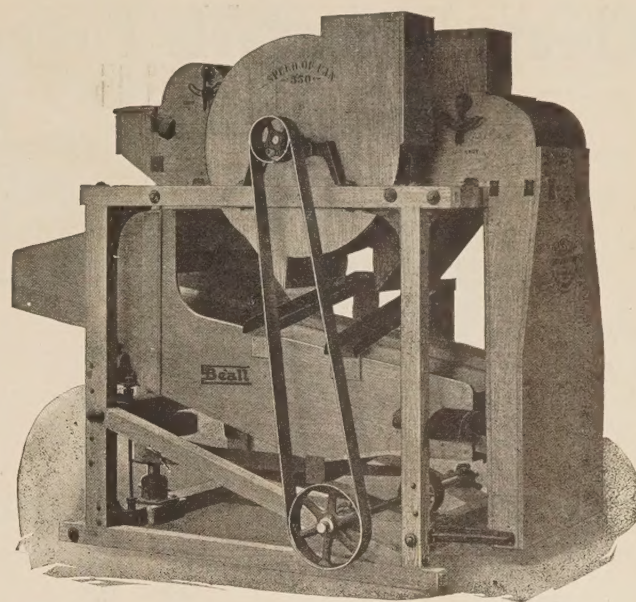
The Anglo-American Mill Co.

460 Central Trust Building
OWENSBORO, KY.

Beall
THE MARK OF QUALITY

The New Rotating Warehouse and Elevator Separator

Guaranteed Without Limit



BUILT IN TEN SIZES

Mechanically a Marvelous Separator

See the New Beall—Then buy! It's fairness to yourself. You can't afford to purchase any separator until this highest of separator values has been investigated. For long service, thorough separation, easy control, simplicity and economy in operation, maximum capacity for size, you cannot buy better value than the New Beall Rotating and Warehouse Separator.

Up-to-the-Minute Separator

It is what a New Beall can accomplish that makes it supreme. What you want is Dollar Production. You have got to tune your business up-to-date and up to meet and beat competition. But you can never bring it to a higher level of efficiency than the tools or equipment you work with. No one can prosper today by using methods of yesterday. You use many modern business necessities—telephone, typewriter, etc.—not because they are cheap to install but because they save that which you are continually figuring and fighting against—time.

Exclusive Beall Features

The New Beall embodies all the best features found in other types of separators, and to these we have added the following pronounced features:

- 1st. It has a rotating motion, slow speed and perfect balance.
- 2nd. It has two fans working independent of each other.
- 3rd. It has large capacity for the amount of floor space.
- 4th. A small amount of horsepower is required for operating.

Reliability, Service and Economy

The New Beall is the result of years of experience by the pioneer manufacturers of mill and grain elevator machinery. It is absolutely reliable, being extremely simple in design, built very strong, is thoroughly braced and will not rack. It has greater capacity for the same amount of floor space, will run with less power and outlast any other type of separator, making it pay for itself in a very short time.

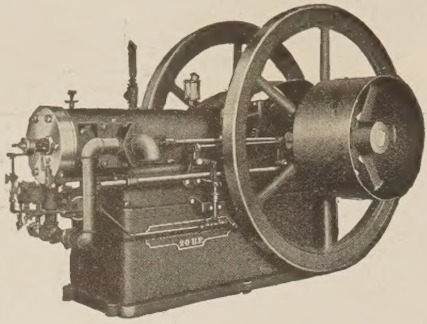
A Beall Book For You

No matter what separator you have in mind buying, post yourself thoroughly by sending for our interesting booklet on "Study of Grain Cleaning" and "The New Beall Separator." It is free. You will find therein ample proof of the worth of our separator and the service behind it. Your copy is now ready. Write for it today.

The Beall Improvements Co., Inc.

DECATUR, ILLINOIS

Cheap, Dependable Power



Fairbanks-Morse Oil Engines

Use Low Priced Fuel.

Automatic Fuel Feed assures the right mixture for both light and heavy load.

Early types of this engine have been in constant use 20 years with practically no outlay for repairs.

Ask for catalog No. 544A35

Fairbanks, Morse & Co., 900 S. Wabash Ave.,
Chicago, Ill.

Fairbanks Scales, Oil Tractors, Pumps, Water Systems, Electric Light Plants,
Windmills and Feed Grinders.

There is nothing in Goodrich Advertising
That isn't in Goodrich Goods

Let our 43 years' experience
save you money

Our forty-three years' experience in manufacturing rubber belts has given us a knowledge of belt construction that will save you money. In making

Goodrich Grainbelt

we use a duck of special design—with the high grade rubber friction between the plies. This construction gives the belt rigidity lengthwise, flexibility crosswise, prevents ply separation, and gives the belt a much longer life.

Get prices on Goodrich Grainbelt. It is the best belt for its purpose at a moderate price—and will save you money.

Write for full particulars



The B.F. Goodrich Company

Makers of Goodrich Tires and
Everything that's best in rubber

Factories AKRON, O.
Branches in all Principal Cities

Ask About the Things You Cannot See

Look at the picture. It shows as well as a picture can what the **Wolf Jumbo Two Pair High Feed Grinding Mill** is like on the outside.

But there are other things, the parts that are hidden from view, that are of just as great importance to the prospective feed mill purchaser as the outer appearance of the machine.

There are the bearings. You don't know what the bearings on this machine are like or why they minimize the friction list. *But they do!*

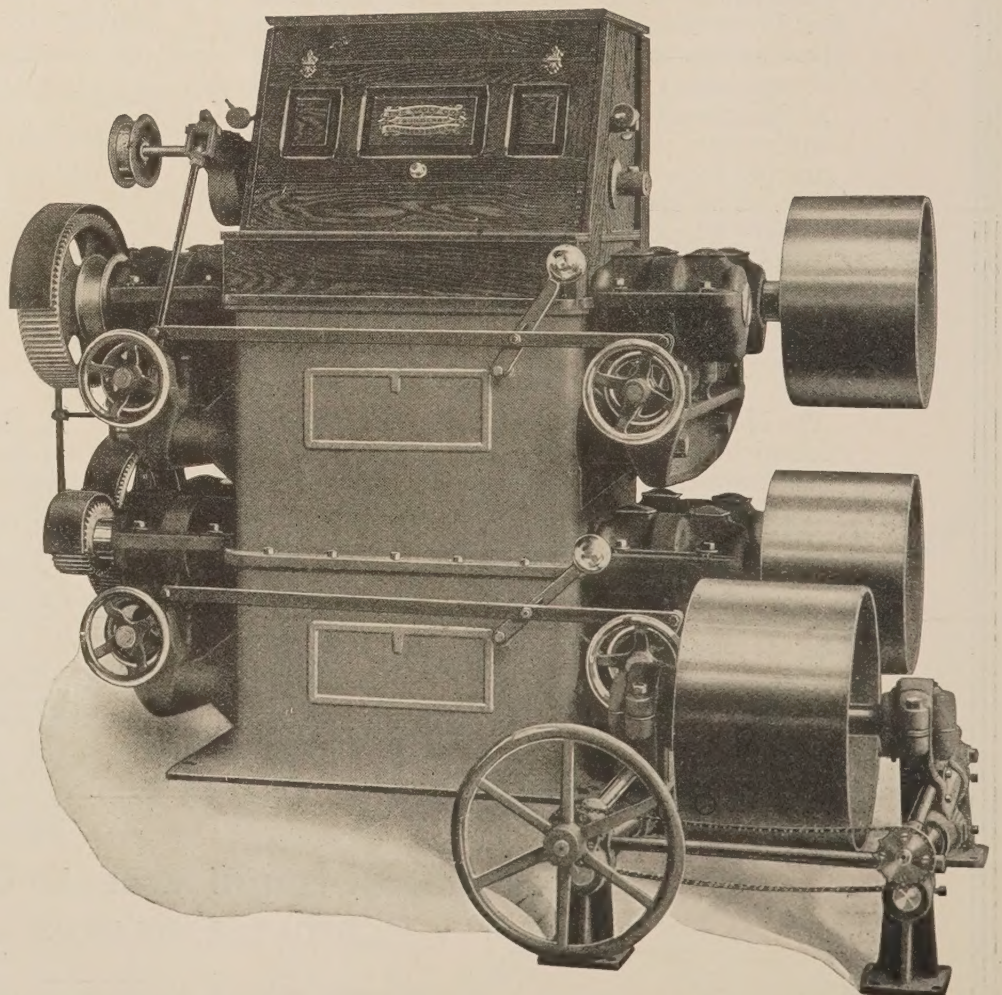
There is the feeder mechanism. You have a hazy idea that it is probably somewhat different from other feeders. And it is *considerably!*

There are the grinding adjustments. You can't tell from the picture why they are such positive safeguards to the rolls. *But they are!*

It is about these important features that you want to know—and we want to tell you.

If you write that letter NOW it will only be two or three days 'till you know as much about this machine as we do. We have nothing to hold back.

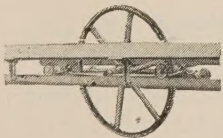
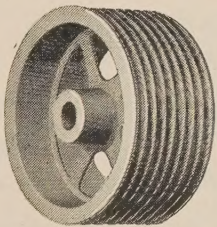
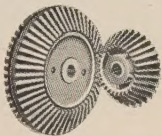
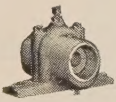
THE WOLF COMPANY
CHAMBERSBURG, PA.





Nordyke and Marmon Company

Power Transmission Machinery



You can secure from us not only the most efficient milling machinery, but also all the necessary appliances for a complete installation. The manufacture of power transmission machinery and appliances for elevating and conveying is an integral part of our mill machine business.

Brief descriptions, together with complete tables of prices, dimensions and weights, are found in our catalog No. 1320. It's yours for the asking.

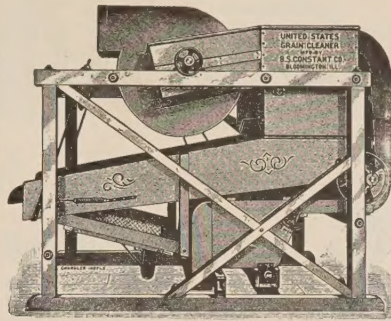
Nordyke & Marmon Company

ESTABLISHED 1851

Indianapolis,

Indiana

America's Leading Mill Builders



THE U. S. Grain Cleaner

is the best in the Union and should be in the top of all elevators where Corn, Oats and Wheat are shipped.

Higher Grades—Higher Prices.
Long life machine.
Ring or Chain Oiling Bearings.
Balanced Eccentric.
Five Separations and

All the Corn Saved.



The Constant Safety Ball Bearing Man-lift

the most satisfactory connecting link between Cleaner and Sheller.

Best made.
Easiest and safest.
Adjustable Brakes
which we guarantee.

State distance between floors and get our

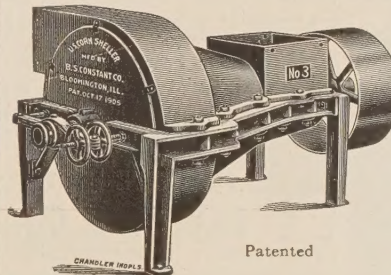
Net Price

U. S. Corn Sheller

Fan Discharge,
over or under, right or left hand.

Iron or Wood Frame.
No Lower Hoppering.
Cheapest Installed.
Quickest and Cheapest Repaired
of any Sheller on the market.

Send for a Catalog.

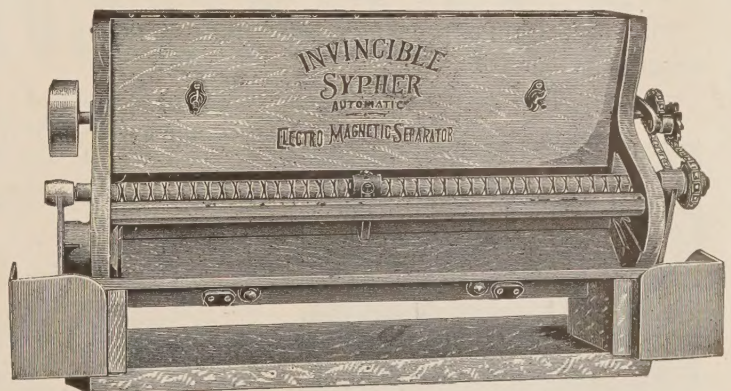


Patented

B. S. CONSTANT CO.
Bloomington Illinois

THE INVINCIBLE-SYPHER

Electro Automatic Magnetic Separator



Very Durable—Small Consumption of Current

Will positively remove all iron from the grain.

Has retaining force of 500 pounds, making it impossible for any iron to pass it.

This machine does not deteriorate with age—on the contrary actually becomes more efficient with use.

We are prepared to furnish a small inexpensive dynamo for it where current is not available.

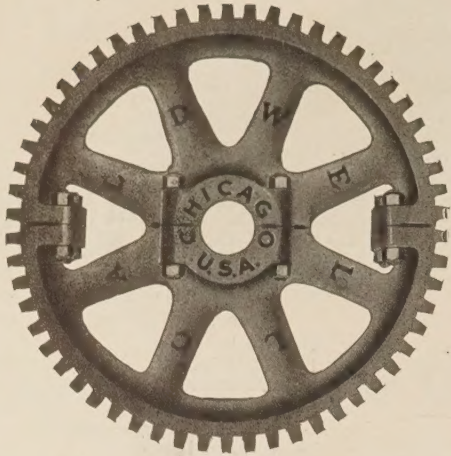
INVINCIBLE GRAIN CLEANER COMPANY

SILVER CREEK, N. Y., U. S. A.

—REPRESENTED BY—

F. J. Murphy, 234 Exchange Bldg., Kansas City, Mo.
The Strong-Scott Mfg. Co., Minneapolis, Minn.
C. L. Hogle, 526 Board of Trade, Indianapolis, Ind.
Frank E. Kingsbury, 3418 Thomas St., St. Louis, Mo.
J. J. Crofut & Co., 613 McKay Bldg., Portland, Ore.
Chas. H. Sterling, Jefferson House, Toledo, Ohio
C. Wilkinson, 25 South 61st St., Philadelphia, Pa.
F. H. Morley, 805 Webster Building, Chicago, Ill.
McKain Mfg. Co., Los Angeles, Cal.
Buckley Bros., Louisville, Ky.

Machine=Molded Gears

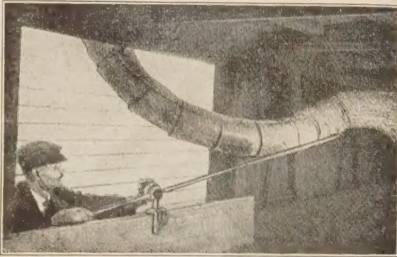


We manufacture a very complete line of Gears 1-inch pitch and larger; they are noted for their strength, durability, true rims, accurate pitch and smooth running. Hence they are highly efficient and economical. If you use gears you should have our Catalog No. 34.

H. W. CALDWELL & SON CO., Western Avenue, Chicago
17th to 18th Sts.,

NEW YORK, Fulton Bldg., Hudson Terminal, 50 Church Street.

The Englehart Flexible Spout Holder and Car Loader

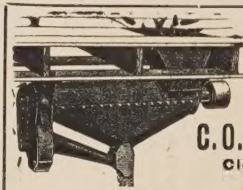


EVERY ELEVATOR SHOULD HAVE ONE

Saves Time, Labor and Annoyance of crawling into car when loading, thus avoiding the dust and dirt in car. Loads car evenly and pays for itself by improving grades. It is a very good investment for any Elevator, as there is nothing in the loader to wear out. Write for name of nearest user, and particulars. Fully guaranteed. Good proposition for agents.

L. E. TAYLOR & CO.

914 Flour Exchange, MINNEAPOLIS, MINN.
Seed Trade Reporting Bureau, Chicago,
Agents.



Triumph
Power
Corn Sheller

C. O. Bartlett & Co.
Cleveland, O.

The Peerless Line

Includes Grain Feeders, Car Loaders,
Overhead Dumps, Man Lifts.
HIGH QUALITY FAIR PRICES
PEERLESS FEEDER COMPANY
RHINEHART SMITH, Mgr., Sidney, Ohio
Ohio Representative Union Iron Works

FUMIGATION METHODS

By W. G. JOHNSON

Contains full directions for Fumigating Mills and Elevators.

313 Pages

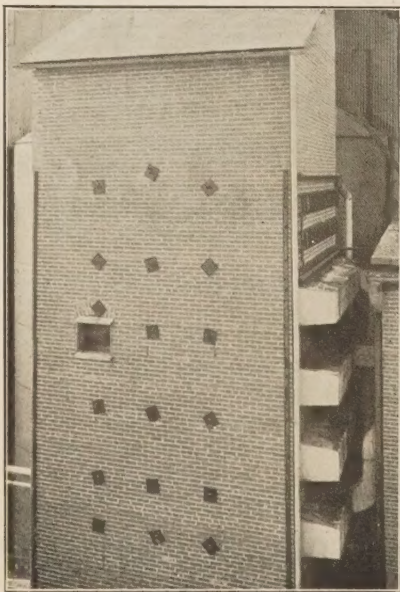
Price \$1

Mitchell Brothers Publishing Co., 431 S. Dearborn St., Chicago

THE REYNOLDS DRIER

The Reynolds Drier is the first that solves the problem, for doing perfect drying.

With it, corn is dried, and left with an appearance of old corn, and the best judges can not detect it.



Every kernel is heated uniformly, before it is subjected to the drying air, the hot air only carrying off the moisture, leaving the grain in the same condition, as though it had been dried by nature.

It is a continuous process, and dries the material uniformly, which is a feature, on a large scale, that excels all others.

For Milling and high class purposes, it has no equal.

For further information, write

E. H. REYNOLDS

332 So. La Salle Street - - CHICAGO, ILL.

The First Successful

MOLASSES FEED MIXER

ever invented was the Craig, patented August 22, 1911, No. 1,001,508. Basic claims were allowed on the construction of the spiral and the combination of blending molasses and feed together.

Catalog and full particulars of the Craig System will be cheerfully furnished by the

SOLE MANUFACTURERS

THE S. HOWES COMPANY
SILVER CREEK, N.Y.

REPRESENTATIVES:

F. E. DORSEY, 3850 Wabash Ave., Kansas City, Mo.

E. A. PYNCH, 311 Third Ave. So., Minneapolis, Minn.

W. M. MENTZ, Sinks Grove, W. Va.

GEO. S. BOSS, Jefferson Hotel, Toledo, Ohio

J. Q. SMYTHE, 1034 W. 32d St., Indianapolis, Ind.

WM. WATSON, 703 Western Union Bldg., Chicago, Ill.

WELLER-MADE**Elevators and Mills
use Weller Machinery for its known value**

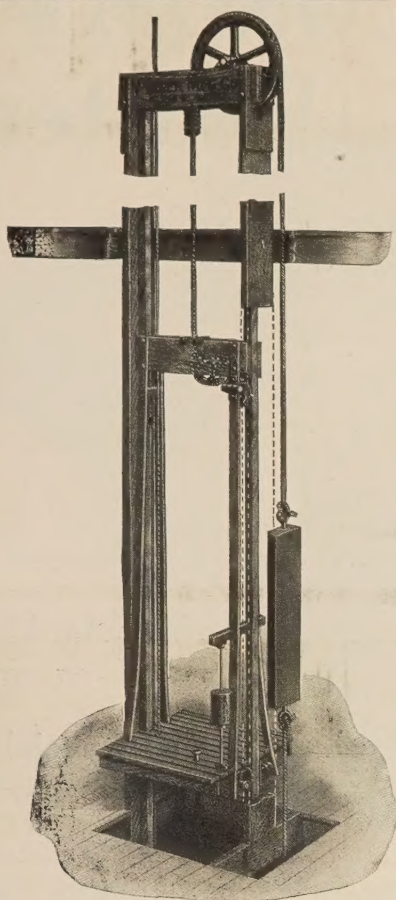
Handling material in Elevators and Mills, demand machinery of a known and efficient character—such is Weller. Its use everywhere has demonstrated its thoroughness, efficiency, and economy in operation. It represents the best in quality, and workmanship.

SPIRAL, BELT, CHAIN AND APRON CONVEYORS, GRAIN FEEDERS, POWER SHOVELS, CAR LOADERS AND UNLOADERS and all machinery for the use of Elevators and Mills can be had promptly. Promptness is a symbol of the Weller Service.

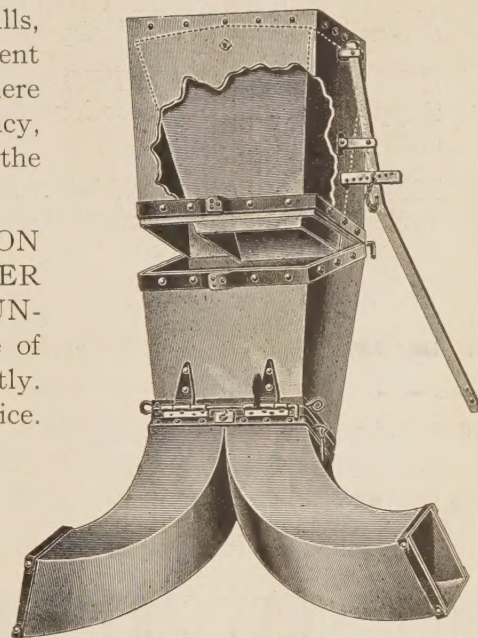
Write for our catalogue No. 20.

Weller Mfg. Co.
Chicago

New York Office: 50 Church Street



Weller Improved Man Lift



Bifurcated Spout

“MUTUAL INSURANCE”

As conducted by the following Companies, pays you, Mr. Elevator Owner, greater dividends than any other investment you make. Their contracts mean

SAFETY, ECONOMY, SERVICE

See that your insurance is written in the following companies:

Millers National Insurance Co.,
Chicago, Ill.

Western Millers Mutual Fire Insurance Co.,
Kansas City, Mo.

Ohio Millers Mutual Fire Insurance Co.,
Canton, Ohio.

Pennsylvania Millers Mutual Fire Insurance Co.,
Wilkes-Barre, Pa.

Mill Owners Mutual Fire Insurance Co.,
Des Moines, Iowa.

The Millers Mutual Fire Insurance Co.,
Harrisburg, Pa.

Texas Millers Mutual Fire Insurance Co.,
Ft. Worth, Texas.

Michigan Millers Mutual Fire Insurance Co.,
Lansing, Mich.

Grain Dealers National Mutual Fire Insurance Co., Indianapolis, Ind.

GRAIN TACKS

LEAKY GRAIN CARS are made hole-proof by the use of KENNEDY CAR LINERS.

The use of KENNEDY CAR LINERS is a determination to defeat leaky cars.

KENNEDY CAR LINERS offer the grain shipper maximum protection at minimum cost.

KENNEDY CAR LINERS are easily installed and save you much time cooping dilapidated, unsound cars

You insure your grain while it is in the elevator; KENNEDY CAR LINERS insure it while in motion and out of your sight and reach.

The Kennedy system is the Only MODERN, EFFICIENT and TEST PROVEN system that protects you against Transit leaks.

Write now for further particulars.

THE KENNEDY CAR LINER & BAG CO.

SHELBYVILLE, INDIANA, U. S. A.

Save Money

Use our

Second-Hand Burlap

for

CAR LINERS

Comes in 100-yard pieces.
Packed 1000 yards to the bale.

Write or wire for price

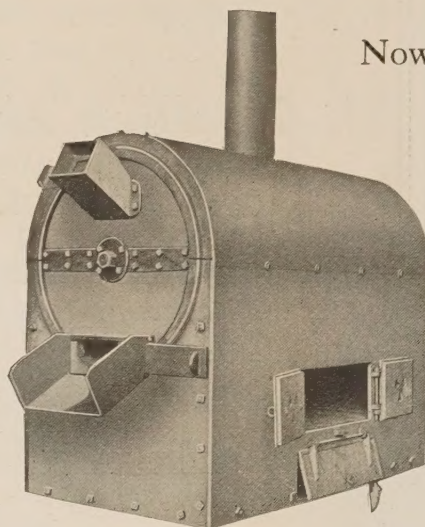
St. Louis Bag and Burlap Co.

325 N. Main

ST. LOUIS, MO.

The "ECONOMY" Drier and Roaster

**For Corn, Buckwheat, Beans,
Peanuts, Etc.**



Now built in three
sizes:

"Baby"

3 to 7 bu. per hour.

"Standard"

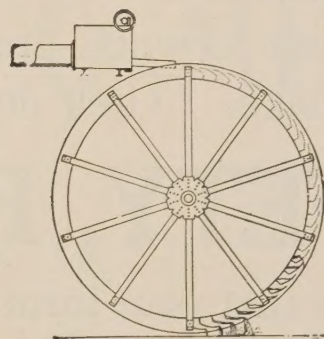
8 to 18 bu. per hour.

"Fitz Special"

100 to 150 bu. per hour.

THE only machines that will thoroly dry grain to any degree of dryness desired. All machines are equipped with a thermometer. The "Fitz Special" is a continuous drier. The machines are self contained and may be set anywhere in the mill. They are approved by the Fire Insurance Inspectors. All are guaranteed to be as represented. Will send on thirty days trial to any responsible party.

For Economy in Water Power



GET the wheel that will give you the full working value of your stream—the I*X*L Steel Overshoot Water Wheel. Winter and summer, in high water and low, it stays on the job as no other wheel can.

More power using less water.

Eventually you will use the I*X*L. Why not now?

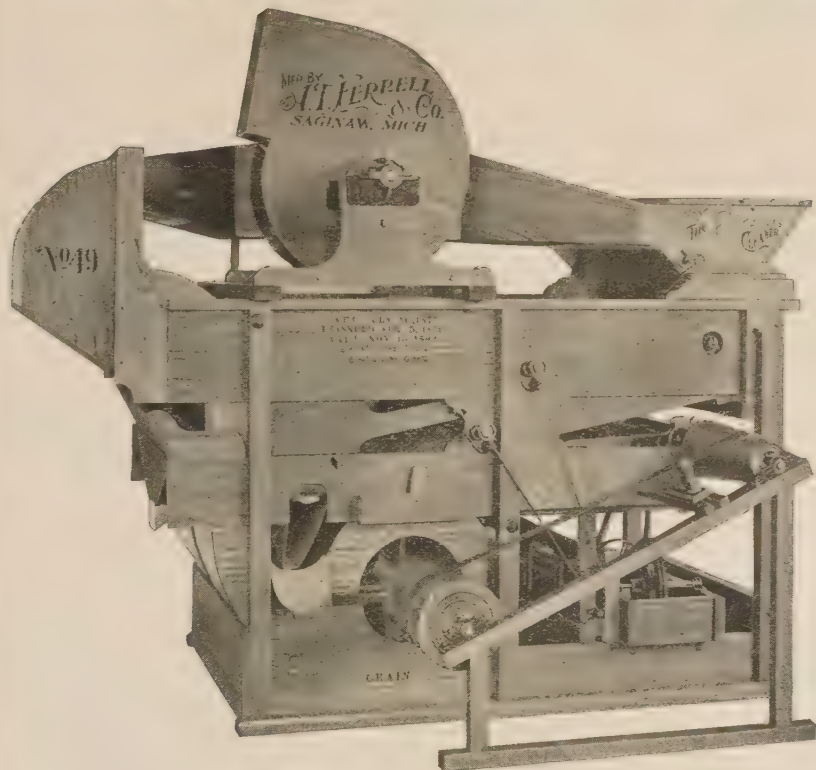
Our catalogs free on request

Fitz Water Wheel Co.

Address Dept. C.

Hanover, Penna.

"Clipper" Grain and Seed Cleaners



The No. 49 Clipper is a first-class grain receiving cleaner for local elevators. It has large capacity, is solidly built, is dustless and will make the most difficult separations. It is simple, strong, convenient and will not easily get out of order. It requires less for repairs than any other grain cleaner on the market and is always ready for business. Ours is the only successful combination cleaner on the market. We give a 30-day guarantee with each machine.

If you are looking for the best cleaner, we would like to show you what we have. Our line of clover seed cleaners is strictly up-to-date. All sizes and capacity. We can furnish machines with Traveling Brushes, Air Controller and all modern improvements. Send for catalog and discounts.

A. T. FERRELL & CO., - SAGINAW, MICH.

The Value of Woven Wire Cloth in Grain Drier Construction

We use **Heavy Woven Wire Cloth** to support the grain in an **ELLIS DRIER** for the highly important reason that **Wire Cloth** unlike a **hot steel plate** will not **parch, meal or discolor the product**. This is due to the fact that wire cloth unlike a steel plate will not hold the heat but dissipates it very quickly.

Sir Humphrey Davies was well aware of this radiative property of wire cloth when he constructed his safety lamp for miners. He surrounded the naked flame of the lamp with **Woven Wire Cloth** and was thereby able to **quickly dissipate** the heat from the flame and keep the surrounding air at a temperature below the ignition point of the fire damp.

Another good illustration is the pop corn roaster and the frying pan. If you have ever attempted to pop corn in a frying pan you will no doubt remember that **even with violent shaking** it was impossible to keep some of the kernels from scorching.

Heavy Woven Wire Cloth is an expensive material and if solid or perforated steel plate would turn out a satisfactorily dried product we would use a steel plate construction in our driers, for by doing so we could cut our costs fully 20 per cent.

If you are the prospective purchaser of a Grain Drier demand **FOUR** things:

- (1) A thin, even grain layer, the thinner the better. Our standard driers are constructed with a grain layer only $2\frac{3}{4}$ inches in thickness and as a further assurance that the grain will be dried evenly we apply the air to both sides of the grain layer.
- (2) A drier which supports its grain with woven wire cloth. A hot steel plate will do injury to the product.
- (3) Continuous feed. It means increased capacity, less attention, more uniform drying, and greater accuracy in removing moisture percentages.
- (4) Return air system, because it is absolutely essential to steam economy.

THE ELLIS DRIER COMPANY

CHICAGO
U.S.A.

Grain Driers

Oat Bleachers

Monitor

The simplest thing
proves to be
the greatest thing

After 40 years— a small iron disc solved the puzzle of how to oil eccentrics

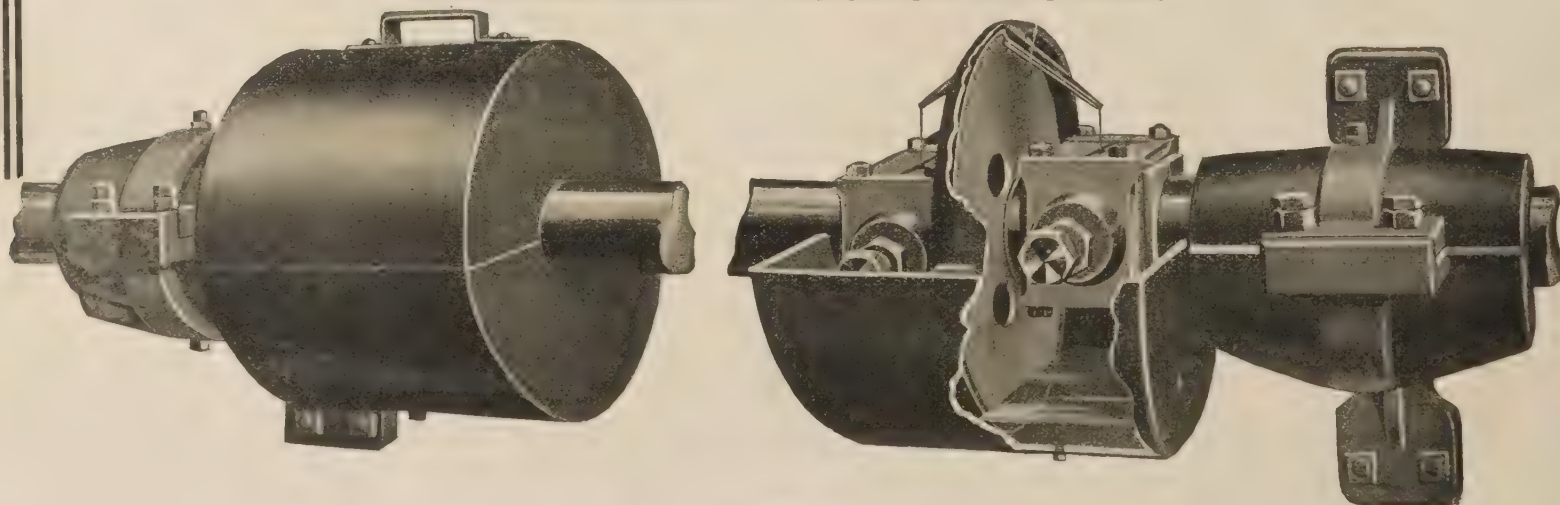
A small, plain iron disc, the simplest thing imaginable, has revolutionized the oiling of eccentrics and wonderfully enhanced the work of grain cleaners. With one stroke one of our designing engineers achieved what inventors and manufacturers of grain separators and cleaners have racked their brains to produce during the past forty or more years. Seven years ago we produced the first mechanical oiling device ever placed on a grain cleaning machine, the only radical change in lubrication for separator eccentrics in nearly half a century—our exclusive patent. Today on upwards of 1200 "Monitor" Grain Cleaners and Separators this new system of eccentric lubrication is working wonders. Some are in use in the largest elevators and terminal houses built on this continent in recent years; in every case they are obtaining from five to ten times more oiling with about one-tenth as much oil; risk from fire, so common to many types of cleaners oiled by antiquated methods is eliminated. These users of this mechanical oiler have obtained wear-proof and fire-proof qualities, they are getting the closest imaginable adjustment for their eccentrics with resultant smoother and more positive action, and they are obtaining these things with practically no care or attention whatever. The grain dealer too often overlooks the vital necessity for perfect mechanism for the eccentrics on their grain cleaning machines; without perfect lubrication trouble arises—they wear quickly, require constant care, and worst of all the work of the screens is much impaired. With this simple "Monitor" oiling device the eccentrics are copiously lubricated in a mechanical manner—a steady stream of oil is running through the eccentric heads; no attention required except to drain and refill reservoir about six times a year. Cut shows you how the entire outfit is housed in heavy iron, dust-proof hoods, no dirt or grit can enter, no oil can leak out—oil soaked floors are unknown. For simplicity this device is a marvel—there are no intricate nor wearing parts, oiling is performed by a solid, one-piece disc which never requires attention of any kind. You can get this outfit with any of our 123 different styles of "Monitor" Separators, Cleaners and Graders—you can get it with no other make of cleaners, it being our exclusive patent.

1200 users—1200 enthusiastic endorsers.

THE HUNTLEY MANUFACTURING CO.,

Silver Creek, N. Y.

The world's largest manufacturers of high grade grain cleaning machinery



PATENTED

A monthly journal devoted to the elevator and grain interests.

Official paper of the Grain Dealers' National Association and of the Illinois Grain Dealers' Association.



Published on the fifteenth of each month by Mitchell Bros. Publishing Co., 431 So. Dearborn St., Chicago, Ill.

Subscription price, \$1.00 per year.

English and Foreign subscriptions, \$1.75 per year.

VOL. XXXII.

CHICAGO, ILLINOIS, OCTOBER 15, 1913.

No. 4.

New Grain Tanks at Harlem, Missouri

Addition to Wabash Elevator Recently Completed—Eight Large Concrete Bins and Two Interstice Bins—Efficient Belt Conveyor System

The old Wabash Elevator at Harlem, Mo., has been built for about fifteen years. It was formerly operated by the Missouri Grain Company but now is both owned and operated by the Wabash Railroad Company. The latter rearranged the old house this spring, installing additional legs, Fairbanks Scale and Garner, and its handling capacity was more than doubled. It then became necessary to

build a storage addition, so the contract was let at once to the Stephens Engineering Company of Chicago, who had just finished the old work.

The storage tanks shown in our illustration were begun April 1 of the present year and finished July 1. They are eight in number, arranged to form two interstice tanks. Each of the large tanks is 22 feet in diameter, 83 feet high from bin slab to bin floor,

with capacity of 24,000 bushels each. The small bins or tanks have a capacity of 6,600 bushels each, giving a combined total capacity of 221,000 bushels. They rest on a solid concrete mattress and are surmounted by a cupola also of reinforced concrete with a composite felt and gravel roof.

The grain is carried to storage by a 30-inch belt conveyor running through a conveyor bridge 50 feet



THE WABASH ELEVATOR AT HARLEM, MO.
Showing New Concrete Bins Erected by the Stephens Engineering Company of Chicago.

long. A 30-inch belt conveyor, running through a tunnel of similar length, is used to return the grain to the working house. The machinery equipment for both the old and new elevator was furnished by the Webster Manufacturing Company of Chicago, Ill., and Tiffin, Ohio.

The suburb of Harlem is just across the Missouri River from Kansas City and is gradually acquiring some very creditable grain storage and working houses. Not far distant, up the river from the Wabash Elevator, is the Burlington house, while the Maple Leaf Elevator, owned by the Great Western Railroad, and still further away, can just be seen from the Wabash Elevator roof. Across the river are a number of smaller houses which afford in that vicinity of Kansas City very good facilities for the storage and handling of grain.

EXPORT PIERS OF PHILADELPHIA

BY E. R. SIEWERS.

If the future grain trade of Philadelphia does not show a remarkable and astonishing increase, it will most assuredly not be owing to the lack of extensive facilities, improvements, and modern methods contemplated at this port, for just at the present time there seems to be a general awakening of sluggish interests, urged on by some of the prominent newspapers, and it is beginning to look as if there were a strong determination on the part of the various trade bodies to cast their influence in this direction and unite with the city authorities, and the transportation companies that have terminals here to boom the trade expansion to the very limit.

Mayor Blankenburg appears to have selected the foreign port of Hamburg, with its great shipping advantages, as one of his ideals, and, in connection with his cabinet and the city councils, will invoke the power just granted by the legislature of Pennsylvania, in the line of eminent domain, thereby securing valuable locations along the Delaware and Schuylkill River fronts for piers, wharves, and docks to be constructed after the most modern plans, and on a scale large enough to fully meet the demands

able to accommodate the largest ocean vessel that can pass up the Delaware River, and it goes without saying that a number of prominent steamship lines have already made overtures to the city authorities for leasehold privileges when the structure is completed.

busily engaged in laying out the work for two big piers to be erected at the lower end of the city, in keeping with the project of an extensive port development. These piers will supersede the old half abandoned structures between Queen and Carpenter Streets, now numbered 39, 40 and 41 south wharves,



THE NEW DOCK STREET PIER, PHILADELPHIA

The new pier of the Philadelphia and Reading Railway at Port Richmond, on the Delaware River front, which is being rapidly completed at a cost of nearly half a million dollars, is another one of the permanent shipping improvements now looming

and these will be completed within the next fifteen months. More than \$1,500,000 will be expended in this direction, and a third pier of the same class is to be included in the undertakings. The size of the new pier has been decided upon and is 80 feet in width by 500 feet in length. Reinforced concrete and steel will form an important feature in their makeup, and with the opening of the great Panama ship canal, joining the Atlantic and Pacific Oceans, an extensive South American and a materially increased general export grain trade is anticipated, and this port is determined to offer abundant up-to-date facilities in its efforts to accommodate all future possibilities, and secure a full share of the national and international business and commercial patronage.

VALIDITY OF TRANSACTIONS WITH GRAIN BROKERS

BY J. L. ROSENBERGER.

The United States Circuit Court of Appeals, Eighth Circuit, affirms a judgment in favor of a firm of Kansas City, Mo., brokers on an account for disbursements and commissions on sales and purchases of grain. The defense was that the transactions out of which the account arose were gambling transactions; that is to say, that it was not intended the grain dealt in should be delivered or received, but that the ventures were mere wagers on the fluctuations of the market, to be settled according to the differences between contract and market prices.

The Court said, on the appeal of *Wilhite vs. Houston* (200 Federal Reporter, 390), that the brokers acted almost entirely upon telegrams and letters from the defendant and his agent. According to the instructions given them the orders for sales and purchases of the grain were executed on the boards of trade at Kansas City and Chicago. The plaintiffs had no interest in the sales and purchases they were directed to make, other than as defendant's brokers; and this relation, as between them, was not affected by the fact that in executing the defendant's orders the plaintiffs assumed the position of principals toward those they dealt with. An order from a customer to a broker, to be executed upon a board of trade, contemplates conformity to the rules and customs which prevail there. The



THE NEW PHILADELPHIA & READING RAILWAY PIER, PORT RICHMOND, PHILADELPHIA

of a great export and import business, and domestic trade in general.

The new pier at the foot of Dock Street along the Delaware River which is being completed by the municipality has already assumed massive proportions and it will be equipped with every known convenience, including the very latest electrical devices, the cost approximating \$700,000, and it will be known to the public as the Dock Street pier. Its area dimensions are 156 by 500 feet, and it is classified as of the double deck style. It will be

up in full sight as a permanent future trade monument. It is a single deck steel structure, and among the steamship lines that will touch at its sides are the Philadelphia Trans-Atlantic, which operates between this city and London, the Philadelphia-Manchester Line, and the Furness and Withey Line to Leith, Scotland, and ports in England.

Director Norris of the Wharves, Docks and Ferries Department of the city has returned from his summer vacation at Rockport, Maine, and is now

rules of the Boards of Trade at Kansas City and Chicago prohibited gambling transactions.

As regards their legality the sales and purchases of grain in the Chicago market were governed by the law of Illinois; those in the Kansas City market, by the law of Missouri. In Illinois a contract of sale or purchase of a commodity for future delivery is void if both parties intended it as a wager upon the market movements to be settled by differences, but not if only one of them has that intention. That is the general rule in the absence of statute. In Missouri the contract is declared void by statute if either party so intends, though the other does not. Nothing appeared in the correspondence of the parties or their conferences before the controversy arose to indicate that the transactions were not intended to be legitimate. The mere fact that no grain was actually delivered or received, but that the sales and purchases were set off against others according to the custom of exchanges, did not show they were illegal. The contracts were therefore fair on their face and presumptively lawful, whatever may have been the undisclosed intention of the defendant. In this situation the law is that when the defendant asserted they were wagers upon the fluctuations of the market, the burden was on him to prove it.

IN THE BUFFALO HARBOR

BY ELMER M. HILL.

Sixteen lake elevators, having a combined capacity of 17,500,000 bushels of grain handle in excellent manner the weekly receipts at the port of Buffalo, N. Y. With the exception of the Richmond

To the right of the Washburn-Crosby mills is the Kellogg Elevator and Kellogg Linseed Oil Mills. The Kellogg Elevator has a capacity of 900,000 bushels. It is equipped with two movable legs and has connection with the Buffalo Creek Railway. To the right of the Kellogg Elevator is the concrete Wheeler Elevator with a capacity of 700,000 bushels. The Wheeler has one stationary leg and like the Kellogg, also connects with the Buffalo Creek Railway.

All of the grain carriers shown in the illustration have a capacity of more than 200,000 bushels. The two shown in the left channel of the ship canal are owned by the Erie Railroad, as indicated by the white bands on the smoke stacks and the one at the right is a Steel Trust boat.

The yearly receipts of grain by lake at the port of Buffalo are approximately 200,000,000 bushels, thus making Buffalo, one of the world's largest grain receiving ports. So far this season more than 85,000,000 bushels of grain have arrived from ports on the upper lakes as compared with 65,000,000 bushels for the corresponding period of last season when the total receipts reached 160,000,000 bushels. Officials of the Western Elevating Association and the Buffalo Corn Exchange express the belief that the receipts this season will exceed the figures of last season by at least 25,000,000 bushels.

The City ship canal shown in the illustration has a minimum depth of twenty-three feet. As all of the big grain carriers draw almost twenty feet of water and a few draw twenty-two feet, this depth must be maintained. Dredges are constantly at work in the channel keeping the mud out of the twenty-three foot depth.

Other elevators in the Buffalo harbor are the

Creek Railroad; the new Kellogg with a capacity of 1,000,000 bushels with two movable legs and connecting with the Buffalo Creek Railroad; the Wheeler elevator with a capacity of 750,000 bushels with one stationary leg connecting with the Buffalo Creek Railroad; the Electric Elevator with a capacity of 2,000,000 bushels with two movable legs and connecting with the Buffalo Creek Railroad; the American Malting Co., elevator with a capacity of 1,000,000 bushels with one stationary leg and connecting with the Buffalo Creek Railroad; the Export Elevator with a capacity of 2,800,000 bushels with three movable legs and connecting with the Buffalo Creek Railroad, and the Connecting Terminal Railroad Elevator with a capacity of 1,000,000 bushels with one stationary and one movable leg and connecting with the Buffalo Creek Railroad.

All elevators in the Buffalo harbor have blowers with the exception of the Export, Mutual, and Union elevators. The Electric, Marine, new Kellogg, Monarch, and Wheeler have cleaners while the Electric, new Kellogg, and Marine have clippers.

During the rush season in the fall of the year, it is not unusual for the elevators to unload 1,250,000 bushels of grain a day. The greatest difficulty is in getting cars fast enough and for this reason unloading has to be held up at times.

A NEW PLANT IMMIGRANT

BY N. L. WILLET

One good plant immigrant may be worth more than one thousand inferior immigrants of the human kind. The pity is we have so few of the former and so many of the latter. There is no greater lover of humanity than he who, searching the world, brings to our American shores and establishes here some new plant to use for grain, hay, fiber, or medicine. The glory for one philanthropist is, too, all the greater when his plant immigrant, brought in and proven to be such a prince among plants, was a plant unrecognized as being of value in its native habitat.

Just such a plant immigrant is Sudan Grass. For four years Sudan Grass, known in Sudan and Egypt in an insignificant way as Garawa (botanically it is a Sorghum), has been tested and tried in various states of our country from Florida to Montana. The results have been so remarkable that the U. S. Agricultural Department declares that the agriculture of certain portions of our country will be revolutionized by this plant. And the facts seem to bear out these strong words! Agriculture has long wanted a plant intermediate as between Sorghum and Johnson Grass. Sudan Grass seems indeed to be a double first cousin of both. It has the sweet quality and palatability of Sorghum, but has a finer texture, is more easily cured, is earlier, is hardier and more drought resistant. Compared with Johnson Grass, whose stem and seed it resembles, it is a heavier yielder in hay and sweeter and more palatable, and is an annual with a root system like oats and is not possessed of the objectionable root system of Johnson Grass.

The sterling powers of the grass are enormous. One seed makes twenty to forty stools or culms. This allows sparse and economical seeding. Five pounds seed thinly planted in 18-inch rows or even in 30-inch rows, are sufficient to the acre. Twenty pounds or two-thirds of a bushel (30 pounds) is sufficient for broadcasting. Planted even in 30-inch rows it will, when cultivated once or twice, cover the whole ground, grow 6 to 8 feet high, and make of easily cured sweet hay four and one-half to six tons per acre. Its seed production, too, is high, being 300 to 500 pounds per acre. The seeds are plumper than Johnson, but not so clean. Ten pounds of Sudan with sixty of early cow peas or early soy beans gives an ideal hay combination. Sudan seems to be almost proof against heat or drought. Where crops of corn, milo, and kaffir have utterly failed, this grass made its four tons hay per acre. No wonder that for the arid sections of Texas, Oklahoma, and Kansas, the United States Agricultural Department should say that Sudan Grass will revolutionize the agriculture of same.

In the more humid states it seems that it should



THE BUFFALO SHIP CANAL, SHOWING A GROUP OF ELEVATORS AND GRAIN BOATS

elevator with a capacity of 250,000 bushels, all the structures make rail, canal and team deliveries.

The accompanying illustration shows a few of the great steel and concrete elevators along the Blackwell canal, otherwise known as the City Ship Canal. The wooden structure shown at the extreme right is the old Erie Railroad elevator which was destroyed by fire two months ago. The small frame structure in front of the Erie elevator is one of the fire tug stations. The Erie railroad elevator had a capacity of 700,000 bushels of grain. It had one stationary leg and made connections with the Erie Railroad.

At the extreme left lie the new Washburn-Crosby mills and elevators with a total capacity of 2,000,000 bushels of grain. A large concrete addition is now being constructed by the Washburn-Crosby Company so that when complete, the elevators owned and controlled by this concern in the Buffalo harbor will be second only to the Mutual Elevator which has a capacity of 3,000,000 bushels.

Exchange with a capacity of 500,000 bushels with one stationary leg and connecting with the New York Central railroad; the Union with a capacity of 100,000 bushels and one stationary leg and connecting with the Delaware, Lackawanna & Western Railroad; the Monarch with a capacity of 450,000 bushels with one stationary leg and connecting with the New York Central railroad; the old Richmond, not now in use, with a capacity of 250,000 bushels with one stationary leg and connecting with the Erie canal only; the Great Eastern with a capacity of 2,500,000 bushels with one stationary and one movable leg and connecting with the Buffalo Creek Railroad; the Marine with a capacity of 650,000 bushels with one stationary and one movable leg and connecting with the Buffalo Creek Railroad; the Dakota with a capacity of 1,200,000 bushels with two movable legs and connecting with the Buffalo Creek Railroad; the Frontier, known as the Crosby elevator, with a capacity of 2,000,000 bushels with one stationary leg connecting with the Buffalo

replace the fox tail millets—the hay being better and having a greater yield. It has a wide habitat, seeds in Montana, two seed crops per year in the South. The stems are unbranched, but are more leafy than Johnson. As regards harvesting, it will give four cuttings, or one seeding and one cutting, or vice versa.

So early is Sudan Grass, so resistant, so prolific, so palatable, so good in combination with early cow peas and soy beans, that it does seem as if America never had a better plant immigrant. Unfortunately the seed as yet is very scarce. But this in another year will be remedied.

OPEN AIR GRANARIES OF THE NORTHWEST

The grain trade in the Pacific Northwest has one distinguishing feature which marks it apart from any other section of the country—the grain is sacked for shipment. At this season of the year



WHEAT IN BAGS AT PENDLETON, ORE.

along all the railroads, the rivers and canals may be seen acres of wheat piled high in sacks, on the ground or on a temporary platform awaiting shipment. Especially is this true in the Inland Empire, that great agricultural section of Washington to which Nature has been so generous.

The sacking of grain in the Northwest is of very early origin and arose through necessity. In the days when wheat was first raised in Washington the greater part of it, in fact all but the limited amount needed for home consumption, was sent to Liverpool by way of the Horn, and was carried in sailing vessels taking several months for the voyage. In the rough seas of the South Pacific there was great danger of shifting the cargo, so grain had to be sacked, as in this shape it was much more stable.

When the first grain in Washington was raised for export, railroads had not been built nor warehouses erected. All the grain that was raised had to be carted by wagon to the nearest navigable

stream and transported by boat to the port. Sometimes the grain had to be handled several times on this rough journey, so here is an added reason why the practice of sacking grain on the farms became so firmly established in the Northwest. Many railroads now traverse the country and warehouses are springing up like mushrooms after a fall rain, but the bag manufacturers still reap a bountiful harvest in Washington.

It is estimated that the sack bill of eastern Washington alone last year amounted to \$2,000,000. The wheat crop of eastern Washington in 1912 was 35,000,000 bushels which required more than 16,000,000 sacks to get it ready for the market. In addition to this the oats and barley had to be cared for, so it would seem that \$2,000,000 was a low estimate for this additional packing cost.

There is no question but that Washington farmers are too progressive to continue paying this extra amount and that it will be a question of a very short time before the storage facilities will be so extended that the picturesque but wasteful sacks will disappear and the bulk method of handling grain generally will obtain.

MEASUREMENT VS. WEIGHT IN GRAIN SHIPMENTS

The Board of Grain Commissioners of Canada have made application to the Railway Commission for an order to have all the cars used for grain in the Dominion stenciled in inches so that the farmers can estimate more closely the value of their load and the loss of grain in transit.

That there is need for some more accurate basis for measurement is admitted on all sides, but the stencil on the cars would not bring it about. There are many reasons for this which were given by Chairman Drayton of the Railroad Commission previous to his sailing for London last month. In the first place it would be impossible to load a car with a perfectly level surface. The height in one end might be quite different than in the other, and a hasty computation of the contents might be altogether wrong if based upon the reading at either end. Rough shunting of a car shifts the grain considerably and the computation at the receiving point would, on that account, be quite as difficult to make as when the grain was loaded, and a loss or gain in transit might be read into the figures which did not represent the true state of the case. Another difficulty to overcome would be to determine the amount of settling that had taken place in transit.

The only accurate way to determine the quantity of a grain shipment is by actual weighing. This is now done at the elevators, but it is pointed out that a dishonest dealer could work considerable injustice in neglecting the accurate adjustment of his scales.

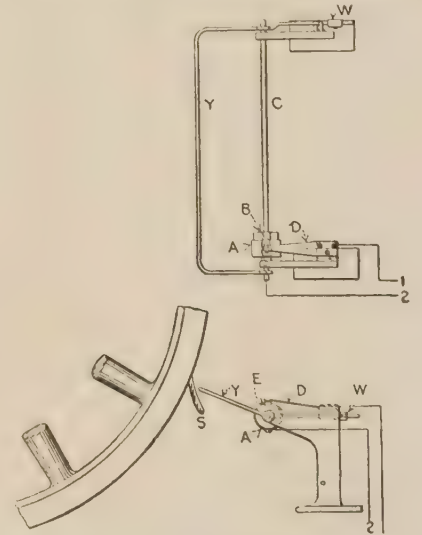
Far better protection to the farmer would come through an act giving the Grain Commissioners jurisdiction over all scales and the manner of weighing grain. By this means a standard scale could be insisted upon with the standardized ways of weighing, all being under the inspection and supervision of the Commission. As it is at present the Grain Commission is solely responsible for the

grain traffic, and yet they have no means at their disposal for regulating weighing, which is the basis for all the transactions, nor for accurately determining the reason for the complaints of shortage at point of destination, many of the complaints no doubt being due to faulty weighing instead of to car leakage, as is claimed.

The chairman of the Railway Commission refused to write the order requested in the hope that the Grain Commission would think his idea of giving them jurisdiction over the scales a better one. If they come to agree with him he predicts that the necessary legislation can be obtained without trouble. The same question has been brought before American shippers by the Interstate Commerce Commission, but they make no predictions of early legislation upon the subject.

SAFETY ALARM FOR ROPE DRIVE

A novel and efficient alarm for telling immediately when a rope drive breaks, was described recently in *Power*. The alarm is one which can be readily and



DETAILS OF THE SAFETY ALARM

easily adopted for grain elevators, the details being as shown in the accompanying illustration. The arrangement is especially desirable in cases where there is only one man working in the power plant or where the engineer must be away from the engine room for any length of time.

A wooden piece *B* is put on the axis *C* and the brass piece *A* forced over this wooden piece, making *A* insulated. The piece *A* has a piece of wood *E* inserted in the circumference; and *A* is put on the axis in such a way that the spring *D* comes in contact with *E* when the arm *Y* is in its normal position. This keeps the electrical circuit open. One wire of the circuit, No. 1, is attached to the spring *D*, and the other, No. 2, is attached to the insulated strip *A*. The arm *Y* is counterbalanced by the weight *W*, making it easy to throw back. The current is supplied by four dry batteries, and two 6-inch gongs, one in the engine and one in the boiler room, are inserted in the circuit for the alarm.

When the rope breaks, the loose strand *S* hits the



Courtesy of the "West Coast Trade."

SACKS OF WHEAT AWAITING SHIPMENT IN WASHINGTON

arm Y, throwing it back and closing the circuit by turning A around so that the spring D comes in contact with it and rings the gongs.

ESTABLISHED ILLINOIS ELEVATOR CHANGES HANDS

When the Hammond Elevator at Stockton, Ill., appeared on the market last spring it was immediately snapped up by R. L. Coomber, who had for the last seven years been establishing an enviable record in the employ of the H. A. Hillmer Company of Freeport, Ill. Immediately the elevator was given the name of the new owner and started in with a volume of business which has given the Devil no chance to find employment there.

The elevator is conveniently situated adjacent to the right of way and directly across from the depot of the Chicago Great Western Railroad. The main building contains eight bins with a capacity of 3,000 bushels each, having an outlet to a con-



THE R. L. COOMBER ELEVATOR AT STOCKTON, ILL.

veyor, running through the basement of the elevator from the track side. This conveyor can also be used for unloading cars into the elevator. Between the large bins and over the entry way there are four bins with a capacity of about 1,500 bushels each. Directly under the overhead bin on the track side is a hopper scale on which all grain is weighed before going into the car. A Barnard and Leas Cleaner is placed on the scale level but on the opposite side. There are two bins over the driveway, one holding about a carload of grain and the other of about the same size which is used for ground feed. The grain pit is in two sections and will hold about five loads of grain.

Stockton is situated in the extreme northwest part of Illinois, where there is considerable grain to be handled and where a great deal of dairying is carried on, so that the supply of grain and the demand for feed work together for the promotion of a considerable grain business, and we wish to expect of Mr. Coomber the greatest success in his new stand.

Cost Accounting for Grain Elevators

The Accountant and a Price to Cover Cost—Mental Cost Estimates Acquired in Practice—A Bad Example of Too Much System—Necessity of a Checking System

By G. D. CRAIN, Jr.

A certain accountant, much of whose business has been the installation of cost systems for manufacturers and business men of all kinds, said recently that the grain trade was the hardest proposition he had ever tackled.

"Take the printers," he began. "They just eat this cost stuff, and it keeps me busy figuring out new angles and working up various methods of covering new propositions as they develop. The printer wants to know the cost of every piece of work, and of every operation, including composition, press-

the case was, the head of a large grain business in one of the Ohio Valley cities, where much business is handled, was interviewed.

"Have you got a cost system?" was the first question shot at him.

"Hm!" he ejaculated. "Who's been talking to you about cost systems?"

Then he went on to elucidate his side of the case which he did very clearly.

"My cost system is largely in my head," he said. "I think I know all that I need to know about my business in order to run it properly. The grain trade is the exception to the rule that cost accounting is necessary, in my opinion. The work done in the elevator is of such various kinds, and the men are so constantly shifted from one thing to another, that anybody who tried to keep tab on the cost of performing the various operations and assembling the totals would find himself involved in a vast maze of figures.

"My plant is modern in all respects. I have motor drive, because I think it's the most economical system of power that can be installed. I have one of the best drying systems in the country. If there is anything that will do the work quicker or better, I want to know it. But as for figuring out the question of cost down to the fraction of a cent, nothing doing.

"What good would it do me, for instance, to know how much money I made on one line of business and how much on another? I know at the end of the year how I came out on my various operations anyway, and a cost system wouldn't tell me anything new. Besides, I wouldn't plan my work as the results of experience, but in regard to new conditions, of which there are a multitude, altogether. So the uselessness of that particular kind of knowledge would be evident."

A good many other elevator men who were talked to had about the same general opinions as those quoted, although the operator referred to expressed himself more vigorously than anybody else. One may assume, then, that most grain men do not believe, in the first place, that detailed cost accounting is practicable; nor in the second, that it is worth while.

The experience of a certain elevator concern in another part of the same valley may bear out the latter feature of their contentions. They were informed by a cost expert—doubtless he calls himself an efficiency engineer by this time—that for the modest sum of one thousand iron men, simoleons, coin of the realm, he would install in their office a system that would enable them at the end of each day to tell how much money they had made that day; and not only that, but how much they had made on each kind of grain handled.

"This is what we have been looking for," the

work and binding, and materials. He revels in figures on the subject, and incidentally is learning how to make a price that covers the cost.

"The machinery trade is the same way. They are dealing with large figures, and the cost question is one that is very necessary to go into. Consequently, whenever I can devise a system that will cover all of the operations of a machine shop and foundry, without too much clerical work being necessary, I usually have no trouble in getting the system installed and extracting my fee from the concern. This is generally true of a good many other businesses.

"But I have fallen down on the job of impressing the grain men, including those with elevators, large and small, with the necessity of going into costs. Most of them look upon my proposition as a sort of chimera, and though they admit that they are working largely without such information, they insist that they are getting along all right as it is. So I have about passed them up."

Just to see how near the truth this statement of



Courtesy of the "West Coast Trade"

A WHEAT RANCH AT ODESSA, WASH.

members of the firm exclaimed joyously, as they unbelted themselves of the one thousand.

The installation of the system took the services of two or three clerks who had not been required previously. They were soon as busy as the proverbial bird-dogs, chasing columns of figures up one page and down another. Judging from the amount of activity the installation of the system created, it was a hummer.

A friend of the concern, in the business in another city, inquired how it was getting along, a few months after work had been begun.

"Fine!" was the reply. "It isn't running smoothly yet, but it looks as if it's going to be a huge success."

"Well," said the other, "wait until you have had an opportunity to check up the figures of the cost system with those you know from experience to be correct, and then give me your opinion."

At the end of a year the two met again, and inquiry was made as to how the system was working.

"System?" inquired the elevator man in a puzzled sort of way. "Oh, you mean that cost accounting proposition. Well, to tell you the truth, we haven't got it any more. We found it was taking so much time and money and energy to run the system that we didn't have anything left for the business. So the system had to go—but we got our money's worth of experience."

It is obvious that in a case of this kind, where additional clerical help is required and where so much expense is piled on as to make a great saving necessary in order to prove the worth of the cost accounting plan, the game will hardly prove worth the candle. Such a structure will fall of its own weight. If a cost system is to be had, it must be one which will be simple enough to be handled along with the regular work of the day, and which will not require a great amount of extra help in its operation.

In public elevators it is sometimes the case that customers of the plant arrange for the use of crews who do their work on a piece basis. In a case of this kind, of course, the grain concern using the services of the elevator knows exactly what it is costing to handle its grain; the charges of the elevator for storage are known, and the labor of the men used in sacking and handling the grain can be calculated in advance. Hence the costs here are worked out exactly. This is not to be regarded as an argument for the public elevator, but undoubtedly the use of its facilities simplifies the big problem of finding out how much it costs to run the business.

For example, the owner of an elevator which has a big platform trade, must sack grain for delivery to the wagons of the feed dealers, in addition sack grain for carload shipment; and on top of that, handles grain by carloads in bulk, using the same crew of men for all of this work and for the other necessary operations of the plant, admittedly has exceedingly slim chances of knowing what the costs of the various kinds of work are.

It goes without saying that it costs more to sack and deliver grain to the feed dealer's wagon than it does to put it into a car. But how much is the difference? And is this difference indicated in the prices charged for the material? In most cases the difference is fixed arbitrarily, and those using the prices are not really informed as to whether they are exactly correct or not. They hope they are sufficient to cover the cost of handling the work and leave a profit; but this cannot be determined absolutely, as the thing is usually worked out.

Many elevators keep no track of the in-and-out movement of grain in sacks from their warehouse, claiming that it is too difficult to get the tally of the man who has charge of this record to coincide with the inventory of the goods themselves. If this is the case something serious is evidently the matter. Either a new record-keeper should be secured or the leak in the warehouse investigated. One of the two must be responsible for the difference.

It may be suggested, without attempting to solve the cost-keeping problems of the elevator man at one stroke, that occasional time studies of the various

operations, extending over a short period, and repeated occasionally, would throw some light on the cost of performing various classes of work; and with these figures as a guide, a basis for figuring would be had which would make possible something like intelligent pricing.

As the situation stands now, the elevator operators insist that they cannot better their position by installing cost systems; while the advocates of the latter take the ground that they will remain hopelessly in the dark until they do so.

As to which is right, deponent sayeth not.

A LARGE SIZED LOADING SPOUT

If loading spouts could talk and assume personality, the large one in the illustration would probably curl up his nose contemptuously at the little one resting at his side. He would say that his ca-

Telescope type and was shipped in four sections carefully boxed, as all such goods must be, for export.

DETROIT BOOMING ITS GRAIN TRADE

The Detroit Board of Trade has been investigating the reason that, in spite of the excellent harbor of that port and the central location as a shipping point, Detroit has failed to get what is considered its proportional share of the grain trade. An active campaign is being planned to influence shippers to direct the grain from the Northwest to Detroit instead of to the Chicago market. It is pointed out that the Detroit route is 75 miles shorter than that from the Soo to Chicago, and lands the grain 275 miles closer to the seaboard.

The grain merchants of the City of the Straits estimate that there is capacity for 3,500,000 bushels of



A GIANT LOADING SPOUT FOR SOUTH AFRICA
Made by the Weller Manufacturing Company, Chicago

capacity, as compared with that of the smaller one, was as sixteen to one; and that he was to be sent on a long journey to fill an important mission far over the seas. This mission was the unloading of grain from the large grain elevator at Durban, Port Natal, South Africa, owned by the Kaffrarian Steam Mill Company of King Williamstown, South Africa.

The order for this large spout was placed with the Weller Manufacturing Company of Chicago. It is the largest spout they ever built and as far as they know, the largest in service. It is 24 inches in diameter and 42 feet long, the length being sufficient to permit the unloading of grain into boats at low as well as at high tide.

The smaller spout is 6 inches in diameter and is the ordinary spout for country elevator service. The large spout is of the regular Weller Flexible

grain on its water front, and that, as there would be no towing bills, the landing of grain into the elevators which are contemplated could be accomplished much cheaper than at the Lake Michigan port. The river which forms the water front at Detroit is deep and the proximity of the Grand Trunk, Pere Marquette, and Michigan Central tracks to the docks greatly facilitate the shipment of the grain by rail.

A further advantage which Detroit has, according to the Board of Trade, is that the coal-loading ports of Lake Erie are but a short run from that port and the return cargo for the grain boats could be secured with very little additional expense. In the past Detroit citizens have pointed with pride to the fact that more tonnage passes its doors than any other city in the world.

The New Abdouline Elevator in Russia

One of the Largest of the Series of Elevators Now Being Erected by the Imperial Bank of Russia—Will Revolutionize Present Grain Handling Methods in That Country—Modern Equipment and Large Capacity—Compares Well with American Elevators

By M. V. VAVILOV

Engineer-Constructor of the Imperial Bank of Russia.

[WRITTEN AND TRANSLATED EXCLUSIVELY FOR THE "AMERICAN GRAIN TRADE"]

[Continued from page 185, September issue.]

The central reinforced concrete part of the elevator has 60 bins of different sizes with an area on the plan of 1.34 square sajenes (65.66 square feet), 0.88 square sajenes (43.22 square feet), and 0.53 square sajenes (25.97 square feet), and a depth (counting without funnels) of 10.64 sajenes (74.48 feet). The general capacity of the central part of the elevator is about 210,000 poods (126,333 bushels). In each of the side wings of the elevator there are 24 bins (area on plan 2.56 square sajenes or 125.44 square feet and 2.36 square sajenes 115.64

the legs of the chief elevators. On the unloading of cars from the tunnel tracks, which are found under the elevator tower, the grain falls immediately into spouts, passing through the foundation walls into the legs of the principal elevators altogether, from four points, two on each side of the railway. The working capacity of one elevator is 2,000 poods (1,203 bushels) of rye an hour, so that the full theoretical receiving power of the elevators is 8,000 poods (4,812 bushels) an hour. In 10 hours of a working day the elevator is capable of receiving about 80 carloads of the Russian railway capacity.

ELEVATING AND CONVEYING

The grain falling into the elevator legs is hoisted by them to the top story of the tower, at the height of 23 sajenes (161 feet), and then from the head of each elevator is directed through self-flowing spouts into one of the following:

- (1) Into a separator, then into the hopper over scales; weighed and let into hopper under scales and distributing tank.
- (2) Evading the separator, into the hopper over scales, weighed, and then into hopper under scales and distributing tank.
- (3) Evading both separator and scales into the hopper under the scales and distributing box.

From the distributing tank under the scales the grain is directed into any of the bins on one side

spouts to the legs of the receiving elevators, is raised by them to the top, weighed and then transferred to the discharge bins. These bins are of about 1,000 poods (602 bushels) capacity, and are set apart for the weighed portion of the grain, and are enough to load one car. Such bins save much time when loading the grain into cars and leave the elevators free for other work. There are ten such discharge bins in the wooden wings of the elevator. Of these, four are placed nearer to the central part and discharge the grain onto the middle railway track in the tunnel. The six remaining are placed near the outside of the inner rail-tracks in a side-row and discharge the grain onto this latter.

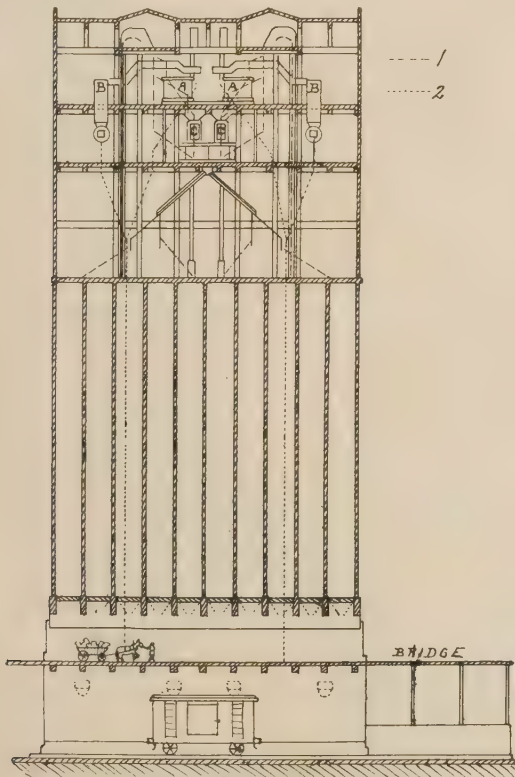
For the discharge of grain in sacks, under the side parallel ways, alongside the bins, a place is constructed where four scales (hundred) capable of letting the grain into sacks are found, two scales on each side of the elevator. In this way the discharge of grain from the elevator can take place into cars or carts, loose or in sacks.

TRANSFERRING THE GRAIN

On the opening of special metal valves when discharging the grain from the bins into the elevators it can be directed by self-flowing spouts to the boots of the receiving elevators and again hoisted above and placed in any of the bins of the elevator.

For letting the grain into the bins, special transfer spouts are used, which are attached by a hook to the lower side of the discharge slide. By these tubes the grain is placed immediately in the hoppers leading to the legs of the principal elevators. In both outer rows of wooden bins, bent tubes are placed for conveying the grain to the discharge openings in the neighboring row of bins. The escape of grain from these while evacuating the outer bins is impossible, owing to the special construction of the discharge valves.

All the discharge valves under the further bins can be brought into action from the space under the outer bins by means of chains. The operation of transferring the grain takes place in case of the



ABDOULINE ELEVATOR—SECTIONAL SIDE ELEVATION

Broken Line 1, Receiving of Grain; Broken Line 2, Dust Discharge.

square feet). The depth of these wooden bins differs—6.25 sajenes (43.75 feet), 6.85 sajenes (47.95 feet), 7.84 sajenes (54.88 feet), and 10.64 sajenes (74.48 feet). Each wooden wing can contain 245,000 poods (144,075 bushels), so that the full capacity of all 108 bins of the elevator is about 700,000 poods (421,166 bushels) of heavy grain. The capacity of the separate bins is from 4,500 poods (2,707.5 bushels) to 12,500 poods (7,521 bushels).

HOW GRAIN IS RECEIVED

According to information about the movement of grain traffic, the Abdouline Elevator will serve by preference the local traffic of carts. As this latter is signalized by great irregularity, it may be expected that at certain times there will be a great press of carts with grain, calling for an indispensable arrangement for their reception. To this end three cart roads have been constructed under the elevator bins; two in the central entrance road under the tower and one under the side wing.

On the reception of grain from carts, it is emptied upon a sieve, destined to retain the larger admixture of dirt, straw and waste; then into the hopper scales, which are placed between the foundation walls of the tower. Thence the grain is directed to

of the elevator by two systems of self-flowing spouts and into the outlet bins, or with the help of the supplementary elevators to the other side of the elevator. Special supplementary elevators also serve for carrying the grain from one place to another on its passage for cleaning and working over through the sorters and clippers.

THE DISCHARGE OF GRAIN

As shown above in the general description of the elevator, the problem of storing grain to be exported afterwards by rail or taken away in carts for the use of local mills, has to be considered.

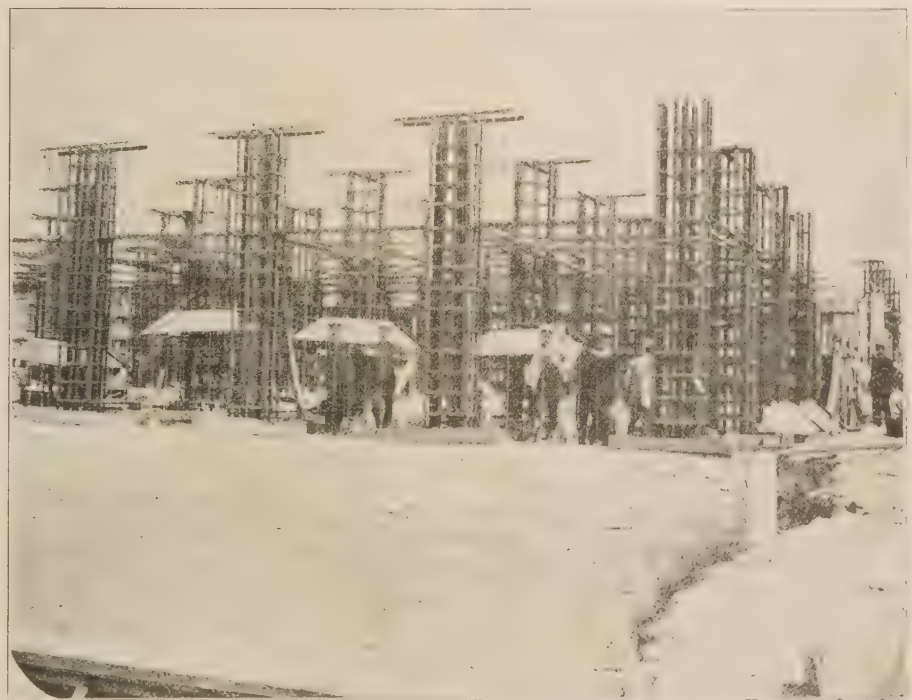
On letting out, the grain is directed loose through the let-out openings in the under bins by self-flowing

heating of the grain, and in order to fully clean and work it over.

A SUMMARY OF THE MACHINERY

The machinery in the Abdouline Elevator consists of apparatus for transferring the grain, cleaning machines, weighing machines, filters, ventilators, sets of conveyors, and a passenger lift.

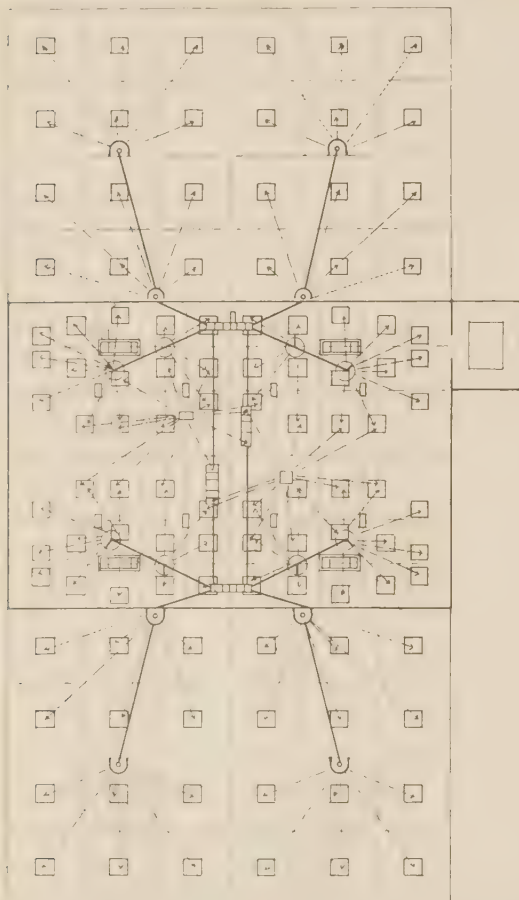
The apparatus for transferring the grain consists of four chief receiving elevators, each capable of passing 2,000 poods (1,203 bushels) of rye an hour; two supplementary elevators of lesser height, of the same capacity, with sets of self-flowing spouts (by which the grain is moved by gravity) with sliding valves, distributing spouts and tanks.



ERECTING THE STEEL FRAME WORK OF THE ABDOULINE ELEVATOR

The system of self-flowing takes place as follows: From the tanks under the scales the grain falls by the principal spout into one of the distributing spouts. These spouts, of which there are two to each of the four separate reinforced concrete bins, can be turned in a horizontal plane, and transfer the grain further into other spouts, under scales which rotate vertically and are so arranged that they can be placed at any angle, from vertical to an angle of 30 degrees. By means of these spouts the grain can be placed in any of the 15 reinforced concrete bins found on that side of the elevator.

For the distribution of grain the wooden bins are broken up into four groups of twelve. For each of such groups two special distributing bins are con-



ABDOULINE ELEVATOR—PLAN OF SELF-FLOWING SPOUTS

Broken Line 1 Shows Receiving of Grain; Broken Line 2, Discharge of Grain; Broken Line 3, Inside Operations.

structed, the upper serving the six upper bins and the lower the six lower bins.

The upper distributing tank delivers the grain either immediately into the lower tank or into one of the six bins by means of a system of special tubes.

From the lower distributing tank the grain falls into the discharge bins or into one of the corresponding six bins. Among the four receiving elevators are placed two supplementary elevators of lesser height for transferring the grain from one-half of the elevator to the other and for extra inward operations with the grain.

The grain can be directed from the distributing tank of the receiving elevator to the boot of the supplementary, hoisted to the top by this latter and then, self-flowing, be let into the distributing tank of one of the two receiving elevators. In this way, by means of transfer through the supplementary elevators, the grain can be placed in any bin of the elevator. Besides this, from the supplementary elevators the grain may be directed into one of two distributing hoppers, and from thence, through a discharge valve, into the supplementary cleaning machines, the weeders and clippers.

Such, in general outline, is the system of self-flowing, only interrupted for vertical transfer of grain by means of the principal and supplementary elevators.

In the Abdouline Elevator there are four separators for the rough cleaning of the grain, capacity

of 2,000 poods (1,203 bushels) of rye an hour. These machines are an improved type of compound shaker double receiver, with three rows of sieves for oats, rye, and wheat. The separators are provided with an automatic brush arrangement for cleaning the sieves with strong air-current brought into operation by mechanical power. Each principal receiving elevator has a corresponding separator.

For separating weeds from the wheat there is a special weed-separator with a capacity of 250 poods (150 bushels) of wheat an hour. This machine represents a rotating cylinder worked mechanically and separating the seeds of wheat from those of weeds.

From the weed-separators the grain which has been cleaned is discharged into either the tank of the supplementary elevator or into one of the bins marked by letters in the sectional front elevation shown on the next page.

For polishing the rye and wheat and for clipping the oats, the Abdouline Elevator contains a clipper capable of working 400 poods (241 bushels) of oats an hour. From the clipper the grain falls into the tank of the supplementary elevator or into one of eleven bins, marked by the letters as shown in the sectional front elevation.

WEIGHING MACHINES

For weighing the grain there are four automatic scales in the working-house of the elevator, which register the weight of the grain automatically, with an adaptation for weighing the residue, and special hoppers; capacity of scales 2,000 poods (1,203 bushels) of oats an hour. These scales are in a room apart which is well ventilated. Each elevator has its corresponding weighing machine.

Below, for receiving the grain from carts, there are twelve cart scales, each for 50 poods (1,805 pounds). These scales are provided with an arrangement for printing the quantity of weighed grain on two tickets. For discharging the grain into sacks there are four automatic scales, "Chro-

The arrangement of dust-collecting by the above described system gives an assurance that the Abdouline Elevator is worked under most hygienic conditions and will be sufficiently assured against the dirt, usually found in most elevators after a short period of exploitation.

ELECTRIC MACHINERY

In order to work all machines, a compound engine of 120 actual horsepower, built by the works of Heinrich Lantz at Mannheim, Germany, is placed in the building erected for a power station.

This engine brings into action an electric generator of three-phase alternating current, which in its turn feeds eight electric motors which are placed in the working-house of the principal building. The power from these motors is divided thus: Each of the four motors of 25 horsepower serves one of the four groups consisting of a principal elevator, separator and dust-collector.

For the transmission of power from the motors to the machines there is a belt-conveyor with the usual shaft, pulleys, etc. Both the supplementary elevators are worked by a motor of 10 horsepower. The elevators can be worked separately or both at once by means of belt-conveyor pulleys and tripers. The working speed of the transmission throughout the elevators is nearly 400 feet a minute. One electric motor of 10 horsepower works the ventilators. This has a lengthened shaft provided with pulleys for backward movement, with a small belt-transmitter which brings the duct-collectors into action. There is a motor of 5 horsepower which serves the passenger lift. All the machinery is worked exclusively by electrical power generators and motors.

LIGHTING

For lighting the elevator there is a direct current generator of 7.5 kilowatts, 115 volts and 1,150 revolutions per minute, worked by the above-named steam engine and situated in the power house. Be-



EARLY STAGES OF CONSTRUCTION, SHOWING FOUNDATION AND FIRST FLOOR NEARLY FINISHED

nos" System, which can weigh from three to eight poods (108.3 pounds to 288.8 pounds).

DUST COLLECTING SYSTEM

A force-pump is used to do away with the dust, which gives the current necessary for the dustless working of the elevators, scales, weed separators and other machines. The dust, under the influence of the air blast, is carried away by a conducting spout to the filters, settles there, and is then directed by the dust-spout below to the basement floor, where it is gathered into sacks and carried away. In the same manner the dirt and waste which has been made during the working over of the grain by the machines is discharged by self-flowing spouts and gathered into sacks.

There are six filters in all, four for the separators, one for the ventilators and one for the clippers.

cause of the frequency of explosion in places where large quantities of grain are stored, no other artificial light except electricity is used in the principal building, thus evading the possibility of explosion or fire.

The yard in front of the elevator is also lighted by electricity in the parts near the principal building and with strong incandescent kerosene lamps, placed over the range of ground belonging to the Imperial Bank.

DETAILS OF CONSTRUCTION

As has been already remarked, the Abdouline Elevator is the highest of all such buildings constructed by the Imperial Bank or existing up to the present, in Russia. Its full height, without foundations, is 26 sajenes (130 feet). Characteristic peculiarities of the elevator are the arrangement of

wooden bins in steps according to height, and the reception of grain at one and the same time in two stories of the elevator; in the lower from cars, and in the upper from carts.

Such an arrangement aims at a compactness of reception operations, concentrating on a comparatively small area of the central reinforced concrete construction.

All machines are placed in the upper stories of the building. For the transfer of grain the principle of self-flowing and vertical elevating is exclusively employed.

In the construction of the distributing valves under the scales an arrangement is adapted by means of which the grain from both pairs of weighing machines may be directed to any of the spouts on that

The Romance of Grain

A History of Grain and the Grain Trade of the World from Remote Ages

By JOHN McGOVERN

Author of "The Fireside University," "Hospitality," "Paints and Pigments," "Trees," "An Empire of Information," Etc.

CHALDEA'S DAUGHTERS (CONTINUED).

All kinds of credit (contracts) were interchangeable, but the particular liability, say Wheat, was stated in its own measures or units. If a substitute were paid, or to be paid, it was stated as being worth so much Wheat.

There is a contract whereby a debt of Wheat was partly paid by the surrender of a slave, partly by

among the African tribes of today, where the *bembo* is made of saplings; or in the Pamirs, where the rafts are always supported by inflated skins. Great cities took their places down-stream. Goods (not grain), came down in the river caravan (as on the Volga today), and the skins were carried back on asses. But, of course, the common and greatest method of commerce was by caravan.

Diodorus of Sicily, the nearest historical contemporary of Herodotus (once the "father of history"), says there were storehouses all along the Tigris and Euphrates. He wrote centuries later.

All the roads of civilized Asia met at Babylon and are described by Herodotus. The caravans still employ some of them. Herodotus counted 111 caravansaries on the road from the Mediterranean to Susa and Ispahan. Babylon subsequently furnished a quantity of grain sufficient to feed the vast army of Persia for four months in the year.

PERSIA.

This country had been a satrapy of Media, and Cyrus the Great was reared at Ecbatana. He captured Babylon, and therefore the northern world, about 538 B. C. It was his son, Cambyses, who overthrew Egypt. When the Ethiopian messenger reached the court of Cambyses, in Egypt, Herodotus says the courtiers told the messenger that "the Persian King lived chiefly on bread, and they then described the properties of Wheat," which the Ethiopian (Dhurra-eater) despised.

The Persians still used the Cuneiform syllabary. By this time there were three "dialects" of it, and the "libraries" were weighted down with "dictionaries."

Marco Polo (middle ages), states that Wheat and Barley grew abundantly in Persia.

X INDIA

FRAGMENT OF LOST HISTORY.

Strabo, the first geographer, thus quotes Megasthenes (whose works are lost): "The second caste (of seven in India) is that of the agriculturists, who are the most numerous and worthy. . . . It often happens that, at the same time and place, the military caste is arrayed and engaged with an enemy, whilst the agricultural, depending on the other for protection, ploughs and digs without danger. And since the land is all held by the King (Rajah) they cultivate upon hire, paying rent of one-fourth of the produce." Megasthenes observes that the caste of shepherds and hunters received a portion of the grain from the King for ridding the land of crop-destroying creatures.

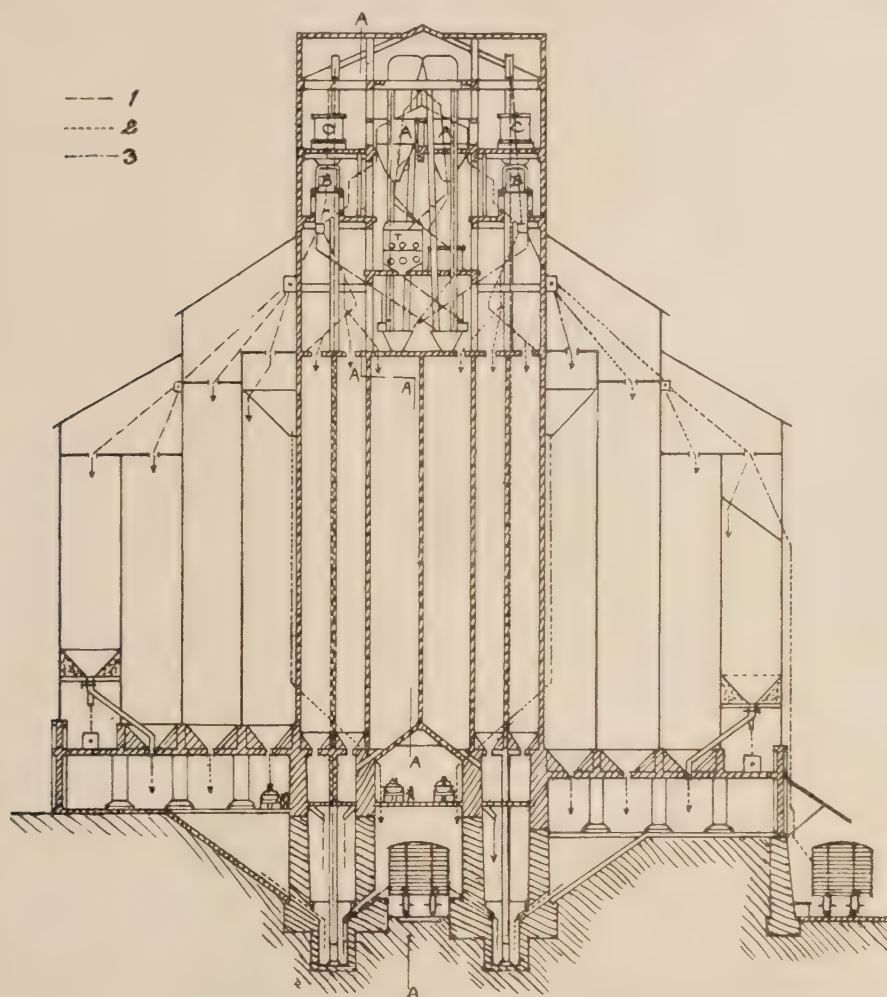
Here at India began the countries of the Rice-eaters. Rice, as human food, requires more fortifying with meat or fat, than the other cereals. Under the operations of the present *Pacific Orbis Terrarum* the Rice-eaters are getting Wheat, and are promised much more. It seems as if the open door and flour in China had ended the long grammatical ("literary") regime.

THE CASTE SYSTEM.

We must think of a country where it is "too hot to eat"—where a big belly means early death. And, to understand India, perhaps we should opine that a whole people, at some past period, captured and enslaved another people, striving to put on them the hardships of all the labor. These slaves were the *pariahs*. Their chains were religious or superstitious. It ended with the complete decay of the masters. It demonstrated the eternal need of equality and fraternity.

The books of India are worthless for any especial purpose of information outside of philology and religion.

Over-population came upon this meager, caste-ridden, contemplative people. Disease and famine became their brother and sister. The foreigner



ABDOULINE ELEVATOR—SECTIONAL FRONT ELEVATION

A, Hoppers and Bins; B, Weighing Machines; C, Separators; T, Weed Separators; Broken Line 1, Receiving of Grain; Broken Line 2, Discharge of Grain; Broken Line 3, Inside Operations.

side of the elevator, and by means of certain slides (of which there are four) a cross current of grain can be directed.

A similar principle of four openings and four separate slides is arranged in the construction of the upper and lower distributing tanks in the garret of the elevator, whence the grain is directed into the wooden bins and discharged into the cars.

MIXED CARS OF GRAIN IN IOWA

The Railroad Commission of Iowa has recently entered a new ruling in regard to the rates for cars of mixed grain and seeds which will effect a great many shippers of the West. The new rule provides that there may be mixed car lots of grain and seed under the Iowa classification, but in such cases all but one of the different kinds of grain must be sacked. The shipper must furnish the carrier with a statement as to the weight of each kind of grain, and the rate will be as for each kind. The minimum weight is 30,000 pounds and any deficiency is to be charged for at the rate of the lowest priced stuff if it is 50 per cent of the car shipment, otherwise the rate of the highest stuff will be charged.

Wheat delivered to a creditor of the lender, and a bill is given for the balance of the debt.

Slaves were apprenticed by their masters to learn trades. The slave will work three months for nothing after learning. "If he is not taught the trade properly" six ka of Wheat are to be paid daily for his hire. The quantity of Wheat allowed for his food is one ka a day.

OUR OWN ANCIENT BOOKS.

Beginning about 1840, the libraries of the ancient Babylonian and Assyrian world were unearthed, and the history of the world took on its new aspects. Previously we had the brief accounts of Herodotus, Berosus and the references and hearsays of other and much later classic authors. Writing of Babylon Herodotus said: "Of all the countries which have come within my observation this is far the most fruitful in grain, . . . The soil is so particularly well adapted for Wheat that it never produces less than two hundred fold. In seasons which are remarkably favorable, it will sometimes rise to three hundred. The ear of their Wheat, as well as Barley, is four digits in size." Herodotus describes the boats that came down the rivers, and the fact that they were sustained by inflated skins shows that caulking had progressed no further at Babylon than

found his way around the Cape of Good Hope, and with his coming made their fate considerably more horrible. While America has sent shiploads of Wheat to India's famine, Bombay has sent shiploads of Wheat to Liverpool to depress the price of exports from the givers.

A DRAVIDIAN VILLAGE.

The following description is from a native writer, T. Ramakrishna. Comparing this relation with village life in China, where the records are complete, this Indian regime has gone on from time immemorial.

The cycle is sixty years. The great festival is that of the new moon. The village, dating from A. D. 1100, has 60 houses and 300 people of ten families of Tulaval Vellalabs. The headman of this caste owns 50 acres, and is the petty magistrate. The policeman watches the fields at night and guards the taxes to the treasury. Three Brahmins are at the temple, and they have seven acres of land. They light the temple and eat the daily offerings of Rice. There are various skilled workmen serving the village. The laundryman receives cooked Rice at night, and flour with broken Rice in the morning. The village usurer is as deeply hated as the village accountant. Taxes must be paid monthly, but harvest is once a year. The usurer lends for taxes, and "takes no interest," being repaid at harvest (January to March). When the villager borrows, Rice is only 19 rupees the measure; but at harvest when he must repay, rice is 27 measures to the rupee. The usurer's "no interest" clears him eight measures in six months.

Separated at a little distance from this village of carpenters, potters, laundryman, doctor, priests, astronomer, schoolmaster, blacksmith, cowherd, policeman, etc., and their families, is the *parcherry* of the pariahs. About 100 live there, and are the servants of the landowners of the village. They are paid in Rice or Dhurra at the rate of 48 measures of Rice per month—a dollar, or \$1.25 at most. They do all the agricultural work. They are very industrious—for that climate. Their hours of labor are from 5 to 10 or 11 a. m., and from 3 to 6 or 7 p. m. They work for the same masters, from father to son, marry when their masters do, and share their mourning. The pariahs live in their own world, and have a festival, "The Boiling of the Rice." Five thousand pariahs of the region may gather at one entertainment. The pariah rests from the heat during April, May and June.

VALUE OF LAND.

As it was in Babylonia, land is measured by the quantity of seed required to sow it to produce a given crop. Quality is adjusted with area.

(TO BE CONTINUED.)

ARGENTINE CORN TO SOUTH AFRICA

During the first three months of this year South Africa exported nearly 20,000 tons of corn from Argentina. The severe drought of the latter part of 1912 in South Africa was responsible for this increased importation. Seven thousand, three hundred and sixty-seven tons went to Durban, of which the greater part was yellow. Almost all of the white corn was reserved for milling purposes, the small amount that was sold brought about \$4.99 per bag of 200 pounds. The yellow corn sold for \$4.02 per bag. All of it was kiln-dried and of the best quality and condition.

Beira was the port of entry for about 4,715 tons, and Lourenco Marques received 7,270 tons of yellow corn. This latter shipment was for the Mozambique Province and was designed for the native consumption. But the natives would not use the yellow corn and most of it had to be reshipped to Europe, entailing a considerable loss.

This prejudice of native peoples for foreign grains is sometimes a serious matter for those who are responsible for their welfare. It will be recalled that during the early famines in India, when the English government was spending vast sums for the relief of the distressed, the natives refused any food except the "paddy" to which they were accustomed, and thousands starved to death rather than eat the unfamiliar grain which was offered them.

The Lane that Had a Turning

The Evil Effects of the Drought Are Turned to Good Account—The Foreman Also Experiences a Change of Luck

By GUIDO D. JANES

August 10, the drought still hung on. Yet Charlie was still optimistic. The drying up of the water in the fire barrels, the running out of the liquid for the cooling system in the gasoline engine and the shrinking of the elevator belting could not perturb him. As he sat in the office handling a sample of corn from Smith of Columbus Township, Foreman Schullian came in.

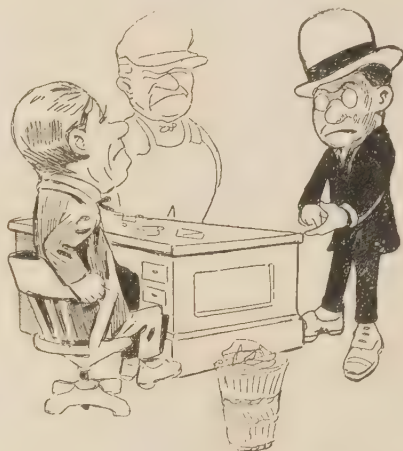
"Out of drinking water. Men have struck," he said. "What shall we do?"

"Let 'em strike," returned the elevator man. "I can't help this dry spell. I've struck, too. Tell them they are a day late."

"All right, sir." And the foreman left.

Charlie still kept up his courage, and was beginning to treat the affair lightly when Schullian brought fresh news.

"Grain in Bin 4 is starting to sweat," he began,



"I HAVE TO CANCEL YOUR INSURANCE"

"and the babbitt is out of the main shafting next the main pulley, and—"

The sentence was not concluded, for Fire Insurance Agent Jones came in.

"I have to cancel your insurance," he said bluntly. "No water for fire protection. Sorry. Good day."

"Good day."

Still Charlie did not cuss. No—he smiled grimly and was about to set his teeth in solid determination not to let adversity get the upper hand.

Hardly, however, had he gritted his teeth when, bang, sounded something in the sacking floor. Rushing thither, he found Schullian prostrate on the floor with a revolver in his hand.

"Am I killed?" he asked.

"No," returned the elevator man after making an examination. "But why did you try to end your life?"

"Because of the drought. Goodness, I am a sure poor marksman."

"So I see. But cut it out. It is a long lane that has no turning."

"You are right, boss. But what's that. Look!" and glancing out of the window they saw the through Overland express at a dead halt in front of the elevator.

"What's the matter?" inquired Charlie, opening the screen and directing his remarks to the engineer.

"Out of water."

"Say," interrupted a silk-hatted individual, coming from a Pullman and entering the range of conversation, "I have a \$1,000,000 engagement in an hour at Kansas City, and I will give anyone \$5,000 for enough water to take us there."

"I'll take you up," said the elevator man. "Mr. Engineer," addressing the man in the cab," drop down to my loading spout and wait."

Charlie then disappeared. Going to the gasoline engine he rigged same up to a small pump, got some hose, connected it up and placed one end with a nozzle on it down into the bin reported by Schullian to be in a sweat. Yes, he poked the nozzle way down to the bottom and got busy with the pump.

Five minutes later water was flowing from the loading spout and into the tender of the engine.

When sufficient water was taken on, the man of the silk hat gave the elevator man a check for \$5,000. Twenty minutes later the Overland express was on its way again.

"How in the Sam Hill did you pull off the stunt?" asked Schullian. "My mental automatic scale can't weigh out the right dope. Put me next."

"I will. When you told me about the sweat in Bin 4 I almost went to pieces. But when I began to see luck changing in our favor I decided to take out revenge on the worst feature of our adversity, so I pumped out the sweat in Bin 4—see?"

"Well, I swan. Who would have thought of it. And—"

Luke Warning just then burst into the office. He did not wait to allow the talkers to reach a period in their conversation.

"Your hand," he cried, grabbing Schullian's arm. "You saved my life. Here is \$100 for it."

"How did I do that? Kindly explain."

"Well, about half an hour ago I was chased by a mad dog. I hurried by here with the brute gaining each step and was about to succumb to the inevitable, when you, like a brave man, fired a shot



"\$5,000 FOR ENOUGH WATER TO TAKE US THERE"

at the canine, ending his ugly life. If I were richer I'd give you \$50 more."

Luke then beat it as fast as he had entered.

Proprietor and foreman gazed at each other a full minute without saying a word. Then each slapped the other on the back.

"Let's go to Kansas City and get a little liquid and dampness in us," remarked Charlie.

"All right, now that the lane has turned."

Minnesota's grain tax jumped this year from \$35,059 of last year to \$47,418. The state's grain export trade alone, according to the Tax Commissioners, amounts to 240,427,302 bushels this year.

Governor Eberhart of Minnesota has set aside a seed-corn week. The State Agricultural College will at this time issue specific instructions to the farmers for picking and curing the corn. Seed will be planted only upon passing this examination.

Important Action of Chicago Board of Trade

Call Board Abolished—Substitute for the "Call" Adopted—How It Will Operate—
Actual Cash Trades Only After Regular Hours—New Rule
Will Block Federal Suit

By JULIAN KUNE

The victory won last May by the Chicago Board of Trade in having trading in "Puts and Calls" legalized by the state legislature, has in part been neutralized by the recent abolishment of the Call Board by an overwhelming vote.

This last Call Board, however, was unlike the one which existed several years ago, where the extensive trading done exerted even a greater influence upon the grain trade of the country than the regular trading on the floor of the Exchange. Who, that has ever seen B. P. Hutchinson, or "Old Hutch," as he was generally known, can forget his towering figure and dominant face as he sat in the front row of the Call Board, which was in the alley back of the Chamber of Commerce, with Charlie Singer, his factotum, sitting beside him and putting down the trades made by his principal? It often required extraordinary attention on Singer's part to enable him to note down the deals as fast as the matchless Charlie Stiles had called them off. That Call Board was for the sole purpose of buying and selling for future delivery, while the one recently abolished was for the purpose of settling on a price which should be in force from the time of the "Call," 2 p. m., until the opening of the next business day.

It is certainly evident, from the overwhelming vote by which this "Call" was abolished, that a majority of the members objected to it because it was a restriction on trading and an apparent violation of the Sherman Anti-Trust Act.

For some unexplained reasons the attitude of the majority of the members of the Board as regards the recently abolished Call has undergone a great change. When first established, it was claimed that it was necessary in order to prevent the entire loss of business by individual members and the building up of a powerful monopoly by the "Elevator Trust." On the other hand, the so-called "Elevator Trust" denied that there were any combinations of elevators, but opposed the establishment of a "Call." Now, however, those members who were at the beginning in favor of the "Call" seem to be opposed to it, if one can judge by the last ballot on the subject.

The officers of the Board, however, have found a substitute in place of the "Call," which is to harmonize conflicting opinions and further the prosperity of individual members as well as that of the Corporation. The new rule looks very plausible and if faithfully carried out may harmonize the various interests and become a source of income to the Board.

When one comes to analyze this new rule which is to supersede Section 32 of Rule IV, one wonders why some such rule has not been adopted by the Board before this. It should certainly commend itself to all its members, for it is nothing but right that the Chicago Board of Trade, which undeniably is the greatest grain market in the world, and financially represents untold millions both as an association and the combined wealth of its members, should draw some financial benefits as well as world-wide honor.

The main provision of this new rule is: "That all wheat, corn, oats, and rye purchased subject to Chicago Board of Trade weights, or Chicago inspection, by a member or members of this association at points outside of Chicago for shipment to this market (the term this market as used herein including all places where Chicago inspection or weighing prevail) shall carry in addition to all other charges prescribed by the rules of this association, a charge of one-half of one cent per bushel in case the purchase shall be made from a non-member, and three-eighths of a cent when purchased from a member of the association."

The rule further provides that in order to facilitate the transaction of all business governed by this rule, the Board of Directors shall establish and maintain during a part or the whole of each day upon which the Exchange is open for business, a place where buyers and sellers of wheat, corn, oats or rye offer to sell or buy the various commodities traded in thereon. By this rule, the bars which prevented members from trading except during hours when the Exchange is open, are lifted and those halcyon days of old when members of the Board met and traded every afternoon and evening during week days, either at the old Sherman House or the Tremont, are vividly recalled, except that the present trading is to be confined to actual cash trades.

There is no doubt but that the Chicago Board of Trade, which has successfully resisted and overcome all the onslaughts and attacks made on it by outsiders who either willingly and maliciously or ignorantly misrepresented the motives and acts of the organization, will continue to brush away all impediments and difficulties which may attempt to bar its onward progress. As long as it lives up to its rules and those of the state and the United States, and as long as its guiding principle is the one adopted by its pioneer founders, nothing can prevent its progress in the line of commercial perfection. It was in harmony with this view that the state legislature of 1859 conferred plenary powers upon the then existing Board of Trade, which is a miniature commonwealth, with its own regulations, which are considered inviolate by both state and Federal courts.

As I wrote on a former occasion, although legislative bodies may continue to enact prohibitory laws against grain, cotton, and stock exchanges, they will never succeed in turning back the dial of commercial progress; they might just as well force out of existence present rail and water transportation lines and substitute in their place antiquated sailing crafts for the transportation of grain and provisions. Congresses and legislatures may come and go, but neither of them will be able to impede the evolutionary movement of commerce any more than they could turn back the wheel of progress in any other God-created object. Speculation, that bugbear of the average congressman and legislator, existed ages and ages before gold and silver became the medium of exchange. Even way back during the ages when primitive man was using cattle, salt, shells, tobacco, leather and wampum as a medium of exchange, he speculated in a way to add to his material goods, the only difference between speculation during those and present days is, that whereas primitive man had no idea whatever of what was right and what was wrong, and often took by force what he could not obtain by speculating, the speculator of today is more or less governed by moral ethics and the laws of the land.

Grain merchants necessarily have to be speculators in a more or less degree, for otherwise how could they support the farmer or the producer of the grain? He bears the same relationship to the farmer which the wholesale merchant does to the manufacturer. Just as the wholesale merchant by buying for future delivery the manufactured goods from the manufacturer, to enable the latter to devote his time and capital to the manufacturing of articles, so does the grain speculator enable the farmer to devote his whole time to cultivating his farm and his crop for future delivery on which barring accidents by drought, floods or fire, he sees a clear and good profit in the transaction.

What I said about speculating in grain is also true of speculation in other commodities, among which cotton stands prominent. I never could see the

difference between the cotton manufacturer selling his manufactured articles for future delivery to the wholesale merchant, and the selling of his raw cotton by the producer or his agent, the cotton broker, to the manufacturer. But some will ask the question, how about the forestalling of the market, either in cotton or grain? The answer to this query is: "Forestalling" the market is not legitimate speculation, but a kind of a "hold-up game." It is justly discountenanced by all law-abiding persons whether practiced here or abroad. The time will surely come when the line of demarcation between legitimate speculation and illegitimately forestalling of the market will be more pronounced. Then the opponents of just and legitimate speculation will have no occasion to denounce the buying or selling of any commodities for future delivery.

A PACIFIC COAST STORAGE UNIT

In the following illustration is shown a unit in the chain of Pacific Coast storage elevators owned by the Globe Grain and Milling Company. It is located at San Pedro, Cal., and consists of four



STORAGE BINS OF THE GLOBE GRAIN AND MILLING COMPANY AT SAN PEDRO, CAL.

large cylindrical tanks with an aggregate capacity of 100,000 bushels of grain. The elevator is located on a dock where it receives grain from the steamship *Portland* and transfers it into cars.

The steamer was acquired by the company recently to transport grain from Oregon and Washington points. It has a capacity of 3,000 tons and makes regular trips to the San Pedro elevator and also the elevators at San Francisco, Cal., and Portland, Ore. The elevators are so placed that supplies of grain are always available for the six large flour mills which the company operates.

The government elevator at Port Colborne, Ont., discharged 350,000 bushels of wheat in the remarkably short time of ten hours. This means 35,000 bushels per hour which is "going some."

It is estimated that a loss of \$15,000,000 is incurred in Canada alone by smut. This means an average loss per acre of 84 cents. Fumigation of threshing machines is recommended to cut the spread of this disease.

The Old Man Relieves His Mind

He Points Out the Value of Conventions and Emphasizes Some Ethics of the Grain Business

By WAT PENN



MR. JAMES CALHOUN came into the hotel lobby and sat down beside the Old Man. The Old Man had been there for some time, in fact he always came to the conventions a day or two in advance, and no one was better known where grain men assembled.

"Nothing doing for a day or two, I suppose," Mr. Calhoun began as he seated himself amid a cloud of tobacco smoke and reached a cuspidor.

"Not much," the Old Man replied, "but I like to be the early bird, for sometimes the worm of the convention comes to the surface right here in

the lobby before the first session starts."

"Pretty slim worm, too," Mr. Calhoun asserted. "I kick myself every time I come to one of these conventions. It's a waste of time when I might be at home putting through a big deal."

"Why do you come?" the Old Man asked.

"Oh, to keep my name before the commission merchants. Most of the papers print a list of those present, and I take care that my name is on the list. But as for getting any good out of the meetings, you might just as well listen to the wind in the cupola."

"Don't you ever get any suggestions?" the Old Man asked.

"No," the young man said with a note of scorn in his voice. "The grain business is cut and dried. There ain't anything new in it, nor has been since Joseph cornered the market. It's just up to those who want to make money to hustle for the business. Now last year I handled over 200,000 bushels where another man might have starved. But I hustled for it."

"How did you do it?" the Old Man asked with a show of interest.

"Well, I sort of put one over on the mossbacks," Mr. Calhoun said, waving his cigar butt in a way to include all "mossbacks" in a pitiful class of incompetents. "You see the Boomtown elevator had been getting most of the business before I bought out the house at Spruce Hollow. But I found that the farmers weren't altogether satisfied with the way they were treated at Boomtown, so after a good talk with them I got most of them coming my way. It was just a case of hustle, that's all."

The Old Man leaned forward in his chair. "Why weren't the farmers satisfied at Boomtown?" he asked.

"It was this way. The wheat was coming in pretty dirty and Jim Hawkins at Boomtown tried to clean it before weighing it in. He said he didn't want to pay good money for dirt, and then tried to square himself by saying he didn't want to pay the farmers less than the wheat was worth after making a rough estimate of the dockage. Naturally they couldn't see it his way, and I told them they were fools to put up with such high notions. I told them I would buy their crops as they were threshed, and they fell for it like chickens for a bran mash. I've been getting the business while Jim Hawkins is watching the clouds roll by."

"You don't pay full price for dirty grain, do you?" the Old Man asked with a curious twist on the side

of his mouth where the young man couldn't see it.

"Sure I do," the wise one replied, then adding confidentially, "of course reserving the right to shave the weight a bit to make up for the dockage. But they don't know that, and what they don't know won't hurt them."

The Old Man nodded thoughtfully, then he blew a cloud of smoke into the air and turned to his neighbor. "Young man," he said, "let me tell you something. I was in the grain business when you were taking pap, and while I may not know as much about it as you and Joseph, there's one thing I have found out, and that is that the farmer isn't such a dumb fool as some people think, and while, like most of us, he will try anything once, if he gets scorched he will run like a yellow pup on a Fourth of July every time he sees a firecracker. By the way, Jim Hawkins is here. Had a little talk with him a while ago."

"Must have borrowed the money to come with, then," the young man said with a grin. "Did he say how he liked the prospect?"

"No, he didn't say, but it sort of reminds me of a little story. There was an old mule once down near us which was put out to pasture in a worn-out meadow full of thistles. But he was an easy going old cuss and took it all as it came, thistles and grass,

fertilizer, and the grass came up so thick he never had to eat thistles any more."

The old man stopped and watched a smoke ring as it floated off.

"If he thinks he is going to kick me to pieces he has another guess coming. Why, I've got those farmers so hypnotized that——"

"Let me tell you one thing more," the Old Man interrupted, "and it's a pretty good thing to put under your hat. A man can make an honest living in the grain business, or anywhere else, if he works for it. But just as sure as he tries to work someone else for it, he will choke on a thistle or, what is more likely, be kicked into fertilizer before he knows what struck him. A skunk ain't what you might call popular, but folks would even let a skunk alone if he didn't steal chickens. A man can short-weight for a while and get away with it, but the more he steals the more he has to pay back, and you take it from me that in some way and some time you will have to pay. Now if you will excuse me I will go through that swinging door over there and eat a little thistle with Jim Hawkins."

PAINTING ON A GRAIN OF CORN

One of the most successful miniature landscape paintings ever made was a mountain mill scene depicted on the surface of a grain of corn. The painting was done by Samuel T. Schultz of Camden, N. J., about fifty years ago when he was the nineteen-year-old pupil of the noted artist, Charles A. Wise, of Lancaster, Pa.

When James Buchanan, fifteenth President of the United States, died at Wheatland, Pa., Mr. Schultz, who was a great admirer of the dead man,



Courtesy of the "St. Louis Post-Dispatch."

A MOUNTAIN SCENE ON A SINGLE GRAIN OF CORN

and it wasn't long before his mouth got so hard he could eat a thistle like a nigger does a watermelon; and he thrived. Pretty soon another mule was put in the pasture, but he wouldn't eat the thistles—just picked out the soft spots—and he got fat—and tender. When the grass was all gone and Mr. Second Mule had to fall back on the thistles, he had lost the knack of thistle eating and choked to death on a sharp spine. Then the first mule kicked the carcass to pieces and scattered him over the lot for fer-

attended the funeral and on his return plucked an ear of corn from the Buchanan estate.

At first he attempted to paint the portrait of the dead president on one of the grains, but this proving unsuccessful, he painted the landscape which is shown in the accompanying illustration. On the one side is an old mill, on the other a chalet almost buried in snow. The mountains towering in the distance and the solitary figure with the bag of grain on his back complete a picture which

for composition, perspective, breadth of tone and richness of color would be creditable on the largest canvas, but which on this small surface are no less than remarkable.

Mr. Wise thought so highly of the work of his pupil that he had the grain of corn suitably mounted and sent it abroad where it was exhibited in various capitals of the continent. In some way the tiny painting became lost in its travels and for many years the artist could find no trace of it. Recently, however, he instituted another thorough search and was rewarded by the return of the tiny cereal panel from Berlin, Germany.

This painting is not the only one of minute size which Mr. Schultz has done. Another, quite as remarkable, was painted on a flattened grain of shot about an eighth of an inch in diameter, showing the head of a retriever dog with a duck in its mouth.

THE WHEAT TRAFFIC OF INDIA

The congestion of the market during the harvesting season and the destruction of large quantities of grain from various causes, has induced the Commercial Intelligence Department of India to make a thorough investigation of the storage and transporting facilities of that and other countries. The information thus gathered together has been put in pamphlet form by Frederick Noel-Paton, the Director General of the Department. The pamphlet of 142 pages gives exact information regarding all phases of the Indian wheat crop, and is perhaps the most comprehensive digest of elevator systems and rules of other countries that has ever been compiled. The Russian, Canadian, American, and Argentine elevators are described at considerable length while the European demand and the uneconomical system in vogue in India are treated in detail. A complete series of modern elevators is advocated.

CARS PROOF AGAINST TAMPERING

Indemnity for loss of grain in transit can usually be secured where the car shows signs of leakage, but where the loss occurs through deliberate theft, the seal of the car having been broken and then resealed with a sealing iron, the shipper has no recourse, but must stand his loss no matter how great it may be. The annual losses through theft are considerable, and because of the easy methods of repairing broken seals of the old type, are difficult to prove. But within recent years a



THE TYDEN SELF-LOCKING CAR SEAL

new type of seal has been put upon the market, for which the claim is made that it will do away with this annual loss.

The Tyden Self-Locking Car Seal cannot be removed from a car door without being destroyed. Protection begins as soon as the car is loaded and continues till the authorized person breaks the seal. On account of its quick application and cheapness cars can be sealed for the night and while being loaded or unloaded. The Tyden Seal is self-locking, requiring no press or sealing iron, and is declared to be in itself a complete self-locking lock.

Among the special features of this seal which particularly recommend it to grain and hay shippers, besides those already mentioned, are the facts that it costs less than half a cent to effectually seal the car; that the seal carries, stamped on the band, the name of the shipper or any device he may

wish, bearing up to 17 letters; and that the seals are numbered consecutively, thereby securing an additional guarantee that the wrong car will not be opened by mistake, as this seal number can be mentioned in the bill of lading.

The seals have been upon the market for about eleven years but within the last four years after

the seal was finally perfected, the sales have jumped from 110,000 to 500,000 seals per day. The manufacturers of this seal, the International Seal & Lock Company, with Chicago office at 617 Railway Exchange, attributes success to three terms which can be rightfully applied to the seals, i. e. quick application, legibility, and security.

OUR VISITORS

EDWARD A. FITZGERALD

As a striking instance of the power of mind over matter, let us present Edward A. Fitzgerald of the Fitzgerald Brothers Company, Cincinnati, and secretary of the Cincinnati Chamber of Commerce, who has a tame auto. This has been in the possession of Mr. Fitzgerald for a long time and he frequently demonstrates his control over it before a



crowd of admiring grain men. When first captured the auto was said to have been unmanageable, and Mr. Fitzgerald himself almost despaired of its ultimate submission and it speaks well for his unfaltering will that he finally thoroughly mastered it.

In fact he can feed it gasoline with his hand, although being a very busy man, he much prefers to use a carburetor.

One of its cute little tricks, vouched for by many eminent authorities, is shown in the illustration. Is it any wonder that Mr. Fitzgerald's name as a grain man has almost been enhanced by his achievements as an autoist?

So thoroughly has the "motor germ" been bred in him that now he scorns to use steam trains for anything but long distance transportation. Every year he makes long trips through Illinois, Indiana and Ohio, being well greeted by the populace at every stop.

Only once has he met with any serious mishap and this was while traveling through the lower part of Illinois with Mrs. Fitzgerald as a passenger. Coming to a steep hill, he "killed" his engine and it became necessary for him to set his foot firmly on the brake while Mrs. Fitzgerald did the cranking act. Enter a chivalrous farmer, who, much disgusted at the sight of a beautiful lady engaged in such a hard task, took the crank from her and administered a severe verbal rebuke to the driver. It was necessary to soothe the old farmer before the auto could proceed.

FRANK M. SMITH

There are a number of remarkable things about Frank M. Smith, the well-known Chicago representative of the Huntley Manufacturing Company, Silver Creek, N. Y. It seems to us, however, that the one incident in his extremely vivid career, which is nothing short of miraculous, is that he went through the Civil War without having an arm



or a leg blown off. Not that Frank is careless. By no means. He keeps the same inventory of his personal effects, such as eyes, ears, fingers, etc., as the average individual, but his unconquerable enthusiasm, force and impetuosity have always led him into the thick of events wherever they may be. You can depend upon it that he was mixed up in the center of the fighting whenever it was possible.

He emerged from the war as Second Lieutenant Smith of the U. S. Cavalry with a fine military bearing and an infinite capacity for giving orders. Instead of sitting around some country store enthusing auditors daily with tales of battle prowess as he might well have done, he elected to continue the fight with different opponents. Circumstances caused him to enter the milling and grain field, and he waded through the rudimentary part of this with the utmost ease, until he was selected as field general extraordinary in the Chicago district for the Huntley Manufacturing Company.

Now, as everyone knows, securing orders is a whole lot harder than giving them, and herein is demonstrated his versatility. For he bestrides his order book with as much nonchalance and assurance as he did his (supposedly) fiery steed in the days of '61. His sword and uniform are packed away in some remote corner of an equally remote garret while he uses the more modern weapons of shrewdness, business experience and "hustle." And anyone that plans to steal a march on Frank Smith must get up very early in the morning indeed.



Published on the Fifteenth of Each Month

BY

Mitchell Brothers Publishing Co.

OFFICE:

 Manhattan Building, 431 South Dearborn Street
CHICAGO, ILL.

 HARLEY B. MITCHELL
A. J. MITCHELL...

 Editor
Business Manager

 Subscription Price - - - - \$1.00 per Year
English and Foreign Subscription - 1.75 " "

ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, OCTOBER 15, 1913.

 Official Paper of the Grain Dealers' National Association
and of the Illinois Grain Dealers' Association.

DISCRIMINATION FORBIDDEN IN NORTH DAKOTA

The recently passed North Dakota measure which was at first thought merely to prohibit line elevators from bidding above their market cards at competitive points, has raised quite a rumpus in that state. An appeal was recently made to the attorney-general and the latter in a lengthy discussion declares the law is constitutional.

According to the terms of the act any person, firm or corporation discriminating between different sections, communities, towns, cities or portions thereof after making due allowance for difference in transportation, is liable to forfeiture of charter. It may be seen that the law is very broad and sweeping and can be applied to a dealer or handler of any commodity, and with particular reference to grain may affect the farmer and independent elevator companies as well as the line elevators.

The attorney general holds that the intent of the party discriminating in prices must govern. That is, if the independent buyer is the aggressor and bids above the market price for the purpose of destroying his competitor, then the line elevator is justifiable in meeting this competition. If, on the other hand, the line elevator is the aggressor and bids more for grain at a competitive point, where there is an independent buyer than at a non-competitive point, where there are only line elevators, then the provisions of the act are violated.

It is further held that it is illegal for an independent elevator company to pay to its own stockholders more per bushel for their grain than other patrons. It is complained in some cases that they pay more to their stockholders than to their other customers. A decidedly im-

portant clause in the opinion declares that the market reports sent out by the so-called grain trust are advisory only and not binding on the subscribing elevators.

The whole statement of the attorney general explains the vague and little understood provisions quite plainly and provided he is upheld in his views as to its constitutionality by the courts, it is probable that North Dakota may shortly witness some prosecutions under the act. The redeeming feature of the law now revealed is that its intentions embrace a square deal for all parties and it is not aimed solely at one particular set of individuals.

THE NEW ORLEANS CONVENTION

Another great gathering of the Grain Dealers' National Association has now passed into history. The majority of those who made the long trip to New Orleans are well satisfied with the results obtained. Aside from the chief topic of discussion—the Federal corn grades—there were enough important and interesting matters brought up to make the sessions valuable to everyone.

The complete report of the proceedings is included elsewhere in this issue, a report that was obtained direct by our representatives at the meeting and transmitted in greater part by telegraph. It is the earliest complete and authentic report of the entire proceedings.

A feature of the convention which must not be overlooked and which is dealt with very little in the convention report proper, is the hospitality extended to the visitors by all of New Orleans. From Mayor Behrman and the public officials down to the private citizens there was nothing shown but the warmest welcome and expressions of greeting. The entertainment features fulfilled every expectation and really entertained in every sense of the word. Not only is the Local Entertainment Committee to be congratulated, but every one who helped to uphold the vaunted Southern hospitality. The trip was as predicted a pleasing revelation to many Northern visitors.

A PECULIAR GRAIN CASE

While Canadian laws differ somewhat from our own there is manifested a great deal of interest on this side of the border in a suit against the Winnipeg Grain Exchange now being heard in the courts. The plaintiff, George S. Matthieson, a member of the Winnipeg Grain Exchange, was recently fined \$500 by the Exchange because the grain firm which employed him cut commission rates. Since his employers are not members of the Exchange and he himself has no share or interest in the firm, receiving a salary only, the point raised is a most interesting one.

According to the views of many it is a species of retaliation against the firm through an employee, and as such as illegal especially if the firm receives no direct benefit from their employee's affiliation with the Exchange. In no line of business can an employee direct or influence the policy of his employer. Were the former an officer or even a stockholder in the firm having the power to cast a single vote in the direction of its officers, there is no doubt that the issue would be more favorable to the

Exchange than seems possible from the present outlook.

On the other hand there are many who set forth that when the plaintiff become a member of the Exchange and agreed to abide by its rules and bylaws it was his duty to associate himself only with firms not guilty of such condemned practices as cutting commissions: if he discovered any violation of the rules of the Exchange to which he belonged, it was incumbent on him to either resign his position or withdraw from membership in the Exchange. The position of those defending the Exchange in this manner is plausible but not convincing.

The arm of an Exchange is long and can control a great many things but that it will convince a court of law that an employee is responsible for an employer's violation of a trade rule, not an infraction of any provincial or rational law, seems rather a remote possibility. Even the question of business ethics which nearly always loses out when opposed by litigation, does not enter into the present case or at least only in a very small degree. Of course the position of the Exchange is quite clear in the matter as it undoubtedly aims to prevent collusion between employees and employee in violating a rule, but whether it will prove its contention in the present instance or not, is doubtful.

RAILROAD AGENTS VS. SHIPPERS

The recent decision of the Interstate Commerce Commission in the case of the Franke Grain Company vs. Illinois Central Railroad merely follows the precedent established by the Supreme Court ruling in the Henderson Elevator case. It serves to emphasize more clearly the injustice to shippers under present conditions. In this latest case it appears that the Minneapolis, St. Paul & Sault Ste. Marie Railway published on October 1, 1910, an index of tariffs showing Illinois Central tariff, I. C. C. & A.-5735 to be still in effect. However, in reality this tariff had been canceled on December 8, 1907.

The Franke Grain Company was shown the first tariff by the railway agent and, acting on this information, published and shipped grain from Onawa, Iowa, to Honey Creek, Wis. When the advanced rates were applied on the shipment as per the later schedule, the grain company was told that it had no redress but must pay the higher rates. Later on, the Interstate Commerce Commission told the plaintiff company the same thing, that it could not recover damages on account of the failure of the defendant to have the proper tariff posted at stations.

There is nothing new or novel about the case. It follows almost identically the same lines as the Henderson case and with that as a precedent the Interstate Commerce Commission was no doubt justified in its decision. The present case is cited to show what has become clearly manifest, that mistakes like this are constantly bound to happen in spite of reasonable precaution on the part of the shipper. Within the past few weeks there have been several similar instances. To no unbiased person does it seem reasonable to throw the entire responsi-

bility on the shipper instead of the carrier's agent. The latter should be placed in the same category as other agents and until legislation to such effect is effected the shipper is bound to suffer.

ANOTHER NEW DEPARTURE

The old adage to the effect that "there is nothing new under the sun" may be substantially true. Its infallibility with reference to grain trade journalism may, however, be called into question. We believe there are lots of new things in the grain trade which are capable of being presented in a new and novel manner to readers of the "American Grain Trade." To this end we have made a number of changes in this journal recently and have inaugurated several new departments since the first of the year, all directly affecting or intermingled with vitally important grain matters.

In the present issue there are introduced two new features in the first of the "Old Man" articles and the "Cracked Kernels" department. The "Old Man" is a variation of the Corn Cob Philosopher who is to be encountered in all parts of the country. By his experience in the grain business he is well qualified to deliver valuable advice to the younger element and his profound wisdom is so thoroughly mixed with dry, quaint humor and personal reminiscences as to render his monthly discourses extremely interesting and well worth reading.

A department in lighter vein is the new "Cracked Kernels." Breezy clippings from newspapers and other exchanges, short, snappy paragraphs particularly relating to grain, hay and seed and interpolated with sparkling humor, will shortly make this a most popular feature with all readers. It is the reader's own department and all are invited to send suitable contributions of a light or humorous variety to tickle some fellow grain man's humorous vein, and help to maintain a high standard for the department.

THE BILL OF LADING CONTROVERSY

The importance of the uniform bill of lading was emphasized at the National Convention by two reports on the subject, the Legislative Committee recommending the endorsement of the Pomerene Bill (S. 1654), as it stands, hoping for remedial legislation at some future date; and C. A. Magnuson suggesting various changes in the bill which should be made before it is re-introduced into Congress at the next regular session. Mr. Magnuson recommends the striking out of two sections of the present bill, Section 10, which makes a bill of lading practically a contract, and Section 29, which allows an unwarranted sidestepping of responsibility by the carrier in case goods become damaged while in its hands. These two sections should be eliminated or materially changed, and the trade should give careful attention to them.

One feature of Mr. Magnuson's recommendation, however, if carried out, would defeat the very object most insisted upon by its originator, i. e., that there should be nothing in the bill which would give chance for misinterpretation by the courts or controversy about specific meaning of any point at issue. Mr. Magnuson

suggests, in case his recommended eliminations are not made, that a new section be introduced which starts: "No line or section, paragraph or sentence herein contained, shall be interpreted or construed in any manner to limit, minimize or eliminate the carrier's common law liability." This section would make void some previous sections of the bill or would itself be void, and would leave a loophole for court decision upon every action brought against the carrier for damages under the act. It would leave the shippers no better off than they are at present. It is just such contradictory sections as this that make so many of our laws inoperative.

CANADA AND THE NEW TARIFF

Just what ultimate effect the recently passed Underwood Tariff Bill will have on the American grain trade is, at this time, hard to predict. That it will affect millers more than grain men seems to be the general opinion, but there is no doubt that a great influx of Canadian wheat will have a direct influence upon prices. Wheat at Winnipeg is 5 cents per bushel cheaper than in Chicago, which would allow a handsome profit above transportation charges, provided there was no duty.

But that little countervailing clause will have to be removed first of all. The fact that Canada will first have to abolish her own tariff on both wheat and wheat flour before it can take advantage of the American markets seems to be quite a formidable obstacle. It must not be forgotten that the last Canadian administration was forced out of power solely because it advocated reciprocity, the majority of voters being against the proposition.

Now, however, there seems to be a decided leaning the other way. Many former opponents of reciprocity are now demanding that the Dominion government remove the duty on wheat and flour and the various grain exchanges are throwing all their influence into the scale of popular opinion to force the abolition of the duties. Then, too, it must be remembered that the defeat of reciprocity was not an overwhelming one. The present Cabinet holds office by the comparatively narrow margin of 30,000 votes, a margin which has been, it is figured, considerably cut down if not wiped away altogether.

Then the sentiment of the leading newspapers also would indicate the course of thought. For instance, the *Manitoba Free Press* which was a reciprocity advocate, says:

The evidence in support of the view that the reciprocity pact would have been of great advantage to the wheat growers of Western Canada is, as it always has been, overwhelming. If the Borden Government now abolishes the Canadian wheat duty to meet the new American tariff, the United States wheat market will still be secured to the Canadian farmers, though they will now have to share that market with all the world, in place of having the exclusive rights in the adjoining markets provided for by the arrangement of 1911.

Other papers hitherto lukewarm or opposed to the removal of the duties are now voicing around in open support of it. Thus it will be seen that considerable pressure is being brought to bear upon the Cabinet. The latter body has the power to remove the tariff on any item, but in view of the extreme political issues involved,

it may waive the question and thus put it up to the next Parliament which meets in January.

KING CORN OR WHEAT

We note with some amusement the efforts of not a few country editors to dethrone King Corn and substitute King Wheat. *The Missoulian* of Missoula, Mont., under a big scare-head proclaims that on account of the big shrinkage in the corn crop and the tremendous yield of wheat the scepter has passed, probably forever, from corn to wheat.

Just when and how this worthy editor and some others obtain their deductions we do not know. Certainly not from actual figures. For instance, referring to the last government crop, we find that the final estimate of the total wheat crop approximates 753,000,000 bushels. On the other hand, the corn crop with all the loss taken into consideration will, it is reported, amount to 2,373,000,000 bushels. The trouble may be that these are such tremendous totals as to be not readily comprehended by the lay mind, but it is apparent on the face of it that with such a discrepancy between the two crops, King Corn's position is not yet seriously menaced.

Of course the comments have originated mainly from the states wherein corn production plays but little part. It is but natural that writers in these sections should be interested in pushing wheat forward meanwhile minimizing the corn crop. But a writer must at all times be familiar with his subject lest he lay himself open to ridicule. True it is that the shortage in corn this year is more than made up by the increase in wheat, but total production is what must govern the ruling grain. Corn is still king of American cereals and we see no possibility of its abdication for many years to come.

ON CURBING SPECULATION

A quite prominent writer recently chose for his theme "The Buying and Selling of Chalk Marks" and forthwith proceeded to weave a sermon of lurid hue and texture. And although he was wrong in a number of his premises and many of his statements were entirely too vague and unproven, nevertheless the article had some value from one particular standpoint. That is the writer did not frown on legitimate speculation as a whole but only in cases where the speculator did not intend or want to receive any grain but was merely using it as a cloak for a gambling transaction. A year ago, possibly even less, this writer and others were engaged in the favorite pastime of attacking and condemning futures of all kinds. It must be conceded though that eventually legislation against grain futures is bound to be put through. One of the speakers at the New Orleans Convention this week pointed out the sure coming of such legislation and advised grain men to be ready for it when it arrived. The trouble so far seems to have been that legitimate speculation and gambling as mere transactions cannot be separated, and the legislative measures so far proposed have all been impracticable. But some day a way must be devised, or if not the trend of events indicates that all futures will suffer alike.

EDITORIAL MENTION

The North Dakota Agricultural College will have a dormitory erected solely by contributions of bushels of wheat from the producers of that state.

The confusion of figures this year regarding the crop yields reminds us of the old saying to the effect that there are three kinds of lies, the third of which is statistics.

The progress of Montana as a big grain state may be appreciated from the fact that over thirty new elevators have been erected there since the first of the year.

The uniform system of accounting for elevators in North Dakota, provided for by the last legislature is meeting with a great deal of praise, according to reports.

Now that the world's series is ended the attention of everyone may safely be centered on the coming final discussion of the Federal corn grades at Washington, October 29.

Kansas lost a great part of its corn crop and the Kansas farmers lost their whiskers as well. A Topeka paper sadly calls Kansas a "whiskerless state." Heat and drought caused the sacrifice upon the altar of comfort.

There is an honest mayor in St. Louis. He refused to judge the quality of hay furnished to the city on contract on the plea that he was not an expert and turned over the matter to a committee from the Merchants' Exchange.

To Toledo, from all accounts, belongs the honor of handling the first shipment of Canadian oats under the new tariff rate of 6 cents per bushel. The H. L. Goemann Grain Company received the consignment on October 4, consisting of 40,000 bushels.

Former Governor Moore of Washington has cheered the farmers of that state by predicting a rise of 10 cents per bushel in the wheat price after the opening of the Panama Canal. Inasmuch as he has not yet announced his candidacy for any office, he may be right.

The Kansas Public Utilities Commission is now investigating charges that certain railroads route grain shipments from interior Missouri points across the state line into Kansas so they may charge interstate rates and thus defeat the state maximum freight rate law.

So far as production per acre is concerned this seems to be a banner oats year. Shields River Valley, Mont., led at last reports with 165 bushels to the acre, while there were a number of yields in other sections of the country above 125 bushels to the acre.

Seen through Baltimore eyes, the Erie Canal on which New York State has spent about \$100,000,000, will divert little more grain to New York City. Manifestly, however, the enterprise deserves success and we venture the hope that a great deal of lake commerce may

be diverted through this waterway, which will in the end really not interfere much with all rail shipments to Baltimore and other seaboard points.

The recent arrival of 7,300 tons of shelled corn from Buenos Aires at the port of New York with the reported shipment of greater amounts from Argentina to this country, drives home with a heavy blow the fact that there really is a corn shortage here.

It is understood that the proposed advance of 5 per cent in freight rates to be submitted to the Interstate Commerce Commission by fifty-two railroads in the East, during the present week will not include grain. The boost in grain rates will probably come later on, however.

The special grain tax in Minnesota will cover, it is estimated 240,427,302 bushels this year. The statistics prepared by the Tax Commission show that there are 1,507 elevators in the state and nine whole counties have no public elevators.

Sad state of affairs in Paris! A grain broker there is charged with bribing telephone girls to hold up messages by his competitors. We don't like to think of the imprecations which are now being poured down on the heads of the luckless operators when they say "line's busy."

In discussing the shrewdness of Turkey, a Pacific Coast newspaper comments on the fact that the vaunted shrewdness would be hailed as wisdom were the country to develop to the fullest extent the large grain fields of Asia Minor which even now yield about 300,000,000 bushels of grain annually.

Calamities and disasters always bring the true optimists to the surface. The Springfield (Ill.) *Journal* has discovered such an individual in the Corn Belt, who says: "Don't you know that this corn shortage is going to turn out to be a good thing in the end? It is going to clean up the 1912 surplus, which was a bad thing to have lying around, so far as the market was concerned, and is going to make it easier to maintain a steady market. It gives the Corn Belt an assurance of big prices for what it raised this year and guarantees good prices for next year, no matter what happens." This is pretty sound reasoning in many respects.

An Eastern railroad magazine discusses most ably some of the causes of car shortage, advancing some new theories. For instance, it is startling to learn that a railroad car is in actual train movement on main line track on the average for only two hours and twenty-four minutes out of each twenty-four hours. The speed of freight trains can be increased only at the sacrifice of a part of the tonnage which the locomotive can haul and the abandonment of some of the collateral economics. Even were it possible to increase the speed so much as 15 per cent, the gain in time would be but 22 minutes. This return would involve sacrifices that the railroads cannot afford. The shifting and interchange movements consume on the average 10.1 hours out of 24 hours of the day, or 66.4 per cent of the time that the freight car is in the possession of the railroads. While the

other possibilities in reducing the delays in freight car movement and bringing about a fuller utilization of freight cars are by no means negligible, here center the largest opportunities of reducing the delays that are wasteful of time and money alike.

Buffalo has had more than her share of big disasters recently. Strangely all of these have been grain elevators or mills. The Erie Elevator, the Husted Mill and Elevator and now the Clover Leaf Mill and Elevator. Vivid reminders of the terrible casualties will now be presented by the many suits for damages which will shortly be heard in the courts.

There seems to have been more trouble in the Dakotas this year over the dockage of grain than ever before. Elevator men insist there have been more noxious weeds in the wheat than for many years. The farmers admit there is some truth to the statements but resist the extra dockage. The chief cause of the trouble appears to have been the drought in June. After the wheat had a fair start there was a stretch of cold dry weather in June during which the progress of the grain was extremely slow. This afforded an opportunity for the weeds to forge ahead and in many instances the wheat never fully caught up and weed seed was matured and harvested with the grain.

Grasshopper tales are still very much in evidence. The suggestion quoted in our last issue to the effect that the grasshopper be put to work has met with approval but no practical suggestion has been made as to developing the horsepower or "grasshopperpower." A Kansas reader, however, refuses to let us drop the grasshopper by sending us the following newspaper clipping:

At Warrensburg, Kan., some grasshoppers, observing men at work building a silo in which to store away the corn crop where hoppers could not get into it, deliberately ate through the 1-inch rope which upheld a platform from which a man was placing the top layers of the silo wall, and threw him to the ground, 30 feet below. It may be doubted if the hoppers have permanently stopped work on the silo, but they have clearly shown their intention with regard to it.

Recently, a new development, if it can be called that, has occurred in connection with a long-pending Corn Products Refining Company suit. It will be remembered that one George F. Harding brought an action against the Standard Oil Company and the Corn Products Refining Company, charging that they had formed a "glucose and starch trust" thereby working him injury as a stockholder in the Corn Products Company. This was a fairly explicit and direct charge, but the case has now been in the courts ten years and recently a Federal judge decided a demurrer in favor of the defendants, at the same time granting the plaintiff the privilege of making further showing before the bill is dismissed. Making due allowance for all the weighty problems involved and disregarding the merits of the case, such a period of time is preposterous and places another formidable weapon in the hands of enemies of our present intricate and complicated legal system.

W. N. ECKHARDT
Chicago.

NEWS OF THE TERMINAL MARKETS

R. S. FITZGERALD
Cincinnati.

"PROGRESS", SAYS OUR BOY SOLOMON

Will the Canadians remove the duty so their wheat can come in free? Wheat growers hope so. *Toronto World* urges it. Railroads hope not, as they want the long haul. Millions have been spread on May wheat between Winnipeg and Chicago, excepting free wheat. The effect of the new tariff will be to keep our prices near a world basis. It is a changed condition which all must recognize. Progress.

EXPECT TO WIN OUT NEXT YEAR

The members of the Hay and Grain Exchange of Cincinnati, Ohio, held a banquet at the Grand Hotel late in September at which an informal discussion took place over the proposed new tentative grades of corn. A committee was appointed to investigate the question of the raising of the commissions on corn. It was also recommended that effort be made to secure the meeting of the Grain Dealers' National Association for Cincinnati next year. A large delegation will go to New Orleans to present the Queen City's invitation.

KANSAS CITY BOARD OF TRADE MAY MOVE

The Board of Trade of Kansas City, Mo., is considering a proposal to move into the uptown district. The owners of a building in course of construction at Tenth Street and Grand Avenue have submitted a proposition to increase its height to 12 or 14 stories, using the upper two stories for a trading hall. An approval of the moving proposal was given by an informal vote of the membership of the Board recently and the special building committee is endeavoring to work out a plan to effect the change.

D. G. STEWART AND THE POLICEMAN

D. G. Stewart, well known grain man and banker, and member of the firm of D. G. Stewart & Geidel of Pittsburgh, Pa., is an amateur photographer. Very few are acquainted with this fact outside the circle of his immediate friends, but it is true, nevertheless, that when outing, journeying, or motoring, it has become his custom to take his camera along.

The other morning he chanced to be motoring in Schenley Park. While stopping in order to snap an unusually pretty bit of autumn foliage he was seen by a park policeman, a man of Apollo-like form and statuesque build. The guardian of the law drew near and, after squaring his shoulders and assuming his best pose, said: "Take me."

"I thought it was the province of a policeman," said Mr. Stewart, "to take civilians and not that civilians should take policemen."

ILLINOIS ANNUAL AT CAIRO

There is nothing wrong with Cairo, Ill. On the contrary, there is much that is good in that city. It has a number of high grade grain merchants and we believe the action of the directors of the Illinois Grain Dealers' Association in selecting Cairo as the meeting place for the annual meeting in 1914 is to be commended. Never before has the meeting been held so far in the South. Southern Illinois is no longer barren Egypt. The Nile has overflowed and produced a land of plenty and prosperity.

Illinois grain dealers will be welcomed by such firms as H. S. Antrim & Co., Samuel Hastings Company, Chas. Cunningham & Son, Magee Grain Company, and Halliday Elevator Company, the latter firm being associated continuously in the grain business in Cairo since the war. H. E. Halliday, president of the concern, is in direct charge of the Cairo

office as well as the branch office at St. Louis, where they are engaged in general grain merchandising with a specialty of handling consignments.

The Halliday Elevator, which is owned and controlled by the Halliday Elevator Company, is of 500,000 bushels capacity, situated very conveniently as far as switching is concerned. Business is done in every state south of the Ohio river, and export business to the West Indies and Mexico is always heavy. Supplies of grain are drawn from all the grain producing central states and the Northwest. Cairo may be depended upon to give Illinois grain dealers a hot sprint for their yen, kale, kush and mazuma.

FRANKLIN M. CROSBY

One of the most popular elections of recent years on the Minneapolis Chamber of Commerce was the one held recently when Franklin M. Crosby was elected president of that important body. The grain

PRESIDENT F. M. CROSBY
Minneapolis Chamber of Commerce

transactions on the Minneapolis floor each year are enormous, and the position of president of the body which controls the dealings of the members is a responsible one, but for all his comparative youth Mr. Crosby has the entire confidence of his colleagues, and a progressive and successful administration is predicted.

Mr. Crosby is the son of the late John Crosby, who in 1878 brought his family, including two-year-old Franklin, from Bangor, Me., to Minneapolis, and the following year became a partner in the great firm of Washburn-Crosby Company. Franklin received his early education in the public schools of Minneapolis, finishing at Andover and Yale.

He began his business career in the mills as a sweeper. But he soon found his sphere of usefulness in the wheat department, and is now wheat buyer for the company, one of the largest consumers of wheat in the world. Concentrating his natural energy and education upon wheat, he has come to be regarded as one of the shrewdest and most expert buyers on the Minneapolis Exchange, and at the same time is held in the highest regard for fairness and square dealing by the sellers with whom he deals.

Mr. Crosby was made a director of the Washburn-Crosby Company in 1910, his brother John being secretary and treasurer, and his executive ability and good judgment are looked upon as important factors in the future development of the company.

NEW GRAIN AND COTTON EXCHANGE

The grain men of Texarkana, Tex., are interesting themselves in a grain and cotton exchange for that market. As a progressive measure for that city, and as a method of simplifying trading, establishing trade rules, etc., plan has very many friends. It will be on the same lines as the exchanges at Dallas and Fort Worth. The following officers were elected at a recent meeting: John P. Logan, president; W. A. Arthur, first vice-president; C. G. Davis, second vice-president; H. C. Chapman, secretary; R. F. Hubbell, treasurer. The Exchange will be opened as soon as the location can be agreed upon.

ELECTION AT MINNEAPOLIS

The annual election of officers and Board of Directors on the Minneapolis Chamber of Commerce, Minneapolis, Minn., was held October 2, resulting as follows: President, F. M. Crosby, of the Washburn-Crosby Company; vice-president, F. A. Hallet, of the Hallet, Cary Company.

Board of Directors: C. A. Magnuson, J. S. Mathewson, D. F. Johnson, William Dalrymple, John McLeod.

Board of Arbitration: F. J. Seidel, H. D. Gee, J. C. Wyman.

Board of Appeals: H. G. Fertig, T. B. Murray, W. J. Russell.

AN OPINION ON CORN

Pope & Eckhardt Company, Chicago, said of corn in their market letter of Oct. 10:

"Corn again had the active support of the old bull crowd, who bought December and May freely. Extreme dullness in the trade for cash (old) for shipment, the impending movement of the new, and incidentally the comparatively liberal movement into the Southwest markets make it difficult to 'enthuse' the outsider, although every kind of 'figgers' are used to justify the predictions for extreme high prices sometime or other in this crop year. The price, the saving of feed and the unusually large losses of farm animals are apt, however, to increase largely the percentage of the crop that will seek an outlet through commercial centers."

BUFFALO CHANGES RULES

At the annual convention of the Illinois Grain Dealers' Association last June, protest was made against the advance in commission charges made by the Buffalo Corn Exchange. In the discussion, complaint was heard relative to the unwarranted delays in handling grain at that market because of the reinspection of cars that was insisted upon and the loss in time after inspection, during which the shipper was liable for all changes in the market conditions. This latter complaint was made the subject of a formal protest to the Corn Exchange of Buffalo through Secretary S. W. Strong of the Illinois Association, which was forwarded on July 22 last.

Responding to the complaint, the Corn Exchange adopted a rule, effective October 2, 1913, as follows:

"That the liability of the shipper on grain shipped to Buffalo shall terminate at the expiration of 96 hours, exclusive of date of original inspection, on all cars graded subject to reinspection, account of any inability to thoroughly inspect (plugged cars

excepted), and such cars shall be accepted on the original inspection unless grade is changed within said time."

SHIPPERS OBJECT TO PAYING FEE

Shippers of the states of Missouri, Kansas and Oklahoma recently applied for an injunction against John H. Page, commissioner of agriculture of Arkansas, to prevent him from collecting an inspection fee for all grain, hay and feed sold in Arkansas. The application for the injunction was considered by Federal Judges Walter I. Smith of Council Bluffs of the Circuit Court of Appeals; Frank A. Youmans, of the District Court at Fort Smith, and Jacob Trieber of Little Rock, sitting en banc. This was the first compliance with a recent Federal statute, requiring a Circuit Judge of Appeals to sit with two District Judges to hear interstate complaints.

ARBITRATION SCOPE EXTENDED

The wisdom and policy of substituting arbitration for courts of law in settling grain disputes was upheld in a marked manner early this month when the New York Chamber of Commerce adopted a resolution to place before the Chambers of Commerce and Boards of Trade of the world a plan for settling disputes between merchants of two or more nations without making it necessary to have recourse to law.

This plan provides for the insertion in contracts between merchants of two nations, of a standard clause providing for the settlement of disputes by an arbitration tribunal to be appointed by a commercial body named in the contract.

THE NEW YORK SITUATION

L. W. Forbell & Co., of New York City, say in a recent letter: "Local dealers express little confidence in present values, contenting themselves with buying to supply actual needs and showing no desire under prevailing conditions to increase their stocks. Until it is demonstrated that prices have reached a basis that is sound because of their relation to other food stuffs and the ordinary demands for consumption, stability will be lacking and unsatisfactory cash conditions continue. A marked decrease in the primary movement is needed to maintain existing premiums over the West, and exert a favorable influence among Eastern and local buyers, who with few exceptions usually purchase on firm markets."

A PERMANENT EXPORT CONTRACT

A. J. L. Payne, ex-president of the London Corn Trade Association, is visiting in this country and next month will meet the executive committee of the North American Exporters Association at New York City to seek to arrange for a permanent contract between North American exporters and the London association. The latter association fixes the grain contracts on which the export business of the world in grain is done.

A committee has already been appointed to confer with the London organization. It consists of Henry Stemper of Chicago and George S. Jackson of Baltimore, representing the Americans, and A. T. Stewart of Montreal, representing the grain exporters of Canada.

CORN THE KING OF FEEDS

The editor of the *Wagner Letter*, issued by E. W. Wagner & Co., Chicago, is now in Europe, and in his remarks for October 11, says: "A saunter through English feed stores strengthens the conviction that American corn is the King of Feeds. It is displayed prominently in the windows. Present price for Indian corn or cornmeal is considered relatively satisfactory at 3 cents per pound. The suave English assistant will offer you Argentine corn (Plate corn) he styles it—for around 2 to 2½ cents per pound, and some grades cost him near 1½ cents. Beautifully plump Scotch oats in the London feed stores are offered at 2¼ cents per pound.

"Pollard, which is a fine bran and middlings, sells around 2 cents per pound. There is no substitute for American corn, the feed man tells you with a smile, and its sale is steady. If the English feed

stores can secure 3 cents per pound for the King of Feeds, then 70 to 80-cent corn in Chicago is not—shall we say 'improper.' The English milk magnates have just met, and as result, the price of milk to dealers will advance a little for the winter. The high cost of feeds last winter and the American corn crop loss are factors."

A FLOURISHING HAY AND GRAIN BOARD

The following short but interesting account of the Hay and Grain Board of Trade, St. Paul, Minn., is from its president, Theodore Wolff, of the firm of Wolff & Lehmann. Mr. Wolff believes that his is the best organization of the kind in the Union. He says:

"Our business here in hay is done on the most legitimate order. The hay is weighed and inspected by the state. The cars are usually reinspected after a load has been taken out so as to get at the exact quality of the hay in the car. No man is allowed to haul out a load of hay without producing an order from the scale man, who's duty is to weigh



PRESIDENT THEODORE WOLFF
Hay and Grain Board of Trade, St. Paul, Minn.

each load correctly and issue weight certificates for each car of hay. Railroads bringing in the hay will accept these weights to base their charges on.

"There are 25 members in good standing belonging to this organization, who meet every day at noon at the regular meeting place, 209½ Jackson street and establish prices by openly bidding and asking on the commodity and in that way we get at actual market values issued in local papers that cover the whole Northwest and a shipper knows every day what the stuff has been selling at.

"The association has been in existence for a long number of years and is in good financial standing under the leadership of our worthy secretary-treasurer, Mr. Guy Carleton.

"This is a poor time for hay receipts. The country is busy with grain and not much hay is shipped out. Besides, we have had rain for the last week or so. We have had as many as 45 cars in one day. Yearly average, 4,000 cars."

ANNUAL ELECTION AT WINNIPEG

The annual general meeting of the Winnipeg Grain Exchange of Winnipeg, Manitoba, was held in September, at which the following officers were elected: President, Alvin K. Godfrey; vice-president, S. T. Smith; secretary-treasurer, C. N. Bell.

Committee on arbitration—H. N. Baird, G. R. Crowe, John Fleming, A. R. Hargraft, F. N. McLaren, W. L. Parrish, A. C. Rutton.

Council—W. A. Anderson, W. R. Bawlf, T. Brodie, G. Fisher, J. C. Gage, G. V. Hastings, David Hoon, Andrew Kelly, W. E. Milner, D. Morrison, T. Thompson.

Committee of Appeals—E. W. Kneeland, W. A.

Mathewson, S. A. McGraw, W. W. McMillan, E. S. Parker, S. Spink, C. Tilt.

Mr. Godfrey, the new president, is secretary of the Canadian Elevator Company and has been a member of the exchange for very many years. He has very many friends and very strong recommendations as to his qualifications for his new position.

CHANGES IN MEMBERSHIP

Chicago.—Secretary J. C. F. Merrill of the Chicago Board of Trade, reports that William Nash, James E. Miller, Edwin P. Tawney, John E. Ross, Henry G. Garneau, George M. Lindsey, Wm. B. Page and Edw. A. Gibson were elected members. The memberships of Charles G. Curtis, Earle E. McConnell, Estate of James P. Taylor, Estate of Thomas A. Browning, George W. Wiggs, James R. Godman, Estate of George H. Sedwell and James S. Mursh were transferred.

Duluth.—Charles F. Macdonald, secretary of the Board of Trade, reports that Frank C. Tenney, M. H. Woodward and G. N. Stevenson were admitted to membership, and that W. C. Stinson, A. M. Woodward and P. E. Stroud have withdrawn.

Kansas City, Mo.—The admission of Finley Barrell to membership on transfer from Donald Moffatt is reported by Secretary E. D. Bigelow.

Minneapolis.—The Chamber of Commerce had several additions in membership last month, according to W. H. Moore, statistician. The new members are: C. W. Peterson, H. J. Bates, L. M. Abbey, M. M. McCabe, W. E. Mereness, E. R. Woodward, D. M. Baldwin, Jr., Harry E. Pence, Charles W. Grafft, H. E. Stinchfield, George J. Reed and James DeVeau.

Richmond.—The Acme-Evans Company was admitted to membership in the Grain Exchange according to a report from Secretary Y. E. Booker.

St. Louis.—Members admitted to Merchants' Exchange of St. Louis were O. W. Cash, R. P. Thompson and R. B. Hendershot; those transferred being J. N. Stegall, J. D. Perry Francis and Henry C. Goebel, according to the report of Secretary Eugene Smith.

TERMINAL NOTES

W. H. Axtater, who has been until recently connected with the Armour Grain Company of Chicago, is now in charge of the consignment business of Nye & Jenks Grain Company.

Donald Moffatt, of the Moffatt Commission Company, of Kansas City, Mo., has sold his Board of Trade membership and departed for southwestern Texas, where he will engage in farming.

C. G. Bryant of Duluth and A. G. Chambers of Minneapolis have been appointed by Governor Eberhart, members of the Minnesota State Board of Appeals. The appointments are for three years.

J. A. Bushfield, of the firm of J. A. Bushfield & Co., of Fort Worth, Texas, will engage in the grain business at St. Louis, Mo. The office at Fort Worth will be continued as a branch of the St. Louis house.

A. K. Taylor, of Fagg & Taylor, one of the best known firms of Milwaukee, Wis., was on the floor of the Produce Exchange of New York City recently with the view of opening an Eastern office for the firm in that city.

William H. Howard, the popular secretary of the Indianapolis Board of Trade, was recently elected vice-president for Indiana of the Central Association of Commercial Secretaries at the annual meeting at Omaha, Neb.

Fred E. Jalip & Co., of Chicago, Ill., have incorporated with a capital stock of \$40,000 to carry on a general business in grain and hay. The incorporators are Fred E. Jalip, Oscar Nauman and Arthur A. Levisohn.

Thomas Y. Wickham has become a member of the Beach-Wickham Grain Company of Chicago. Mr. Wickham comes to the firm from the East.

Charles E. Lewis & Company of Minneapolis, Minn., has established a branch office at Lewistown, Mont., with J. F. McCarthy in charge. Grain will be accepted at the new office for consignment to

Minneapolis or Duluth and a general grain commission business will be carried on.

The Katie Grain Company of Kansas City, Kan., was recently incorporated with a capital stock of \$20,000. The incorporators are Fred L. Bedell, and James S. Summers of Kansas City, Mo.; F. W. Horpst, Floyd Bender, A. P. Nugent, Kansas City, Kan.

The E. B. Conover Grain Company with offices in Virginia, Springfield and Jacksonville, have opened an office at Peoria, Ill. Sim Fernandez is in charge. The firm is a member of the St. Louis Merchants' Exchange and the Chicago Board of Trade.

M. L. Walker & Co. of Louisville, Ky., doing a general business in grain and hay, recently filed articles of incorporation. The company is capitalized at \$8,000 and has a limited indebtedness of \$5,000. The incorporators are M. L. Walker, E. B. Walker, C. M. Pate.

W. H. Lake, with A. O. Slaughter & Co., of Chicago, and who has been on the Board of Trade of Chicago for over thirty-five years, was the recipient of very many congratulatory speeches and good wishes on the Board recently on the occasion of his birthday.

A change has been made in the local office of Mason City, Iowa, of Lamson Bros. & Co., of Chicago. J. E. Miller, recently of Greene, Iowa, has taken charge of the office and B. L. Nutting, recently in charge, has moved his headquarters to Sioux City, Iowa, from which point he will travel for the firm in western territory.

The Stafford Grain Company, it is announced, has succeeded the firm of Stafford & Gale at Cincinnati, Ohio. The firm was composed of J. Roy Stafford and Parker K. Gale, and under the change Mr. Gale retires and Harry Niemeyer, who has been with the Cincinnati Grain Company, has joined the firm to act as assistant to Mr. Stafford.

Pope & Eckhardt Company of Chicago are remembering their friends by the gift of a metal box for safety matches. The sides of the box are embossed with the firm name and prize ears of corn. The following was sent with the box: "Uncle Sam forbids our mailing the matches, but you cannot match us in service in grain and seeds in the Chicago market."

Thompson & McKinnon are arranging to open an office in the rotunda of the Rookery Building, Chicago, where they will carry on a general grain and stock commission business. Mr. McKinnon was formerly associated with Logan & Bryan of Chicago, while Mr. Thompson was the Indianapolis correspondent for that firm. T. J. Bresnahan, formerly with the same firm, will be associated with the new house.

The trial of Walter and Emory Kirwan, of the Kirwan Bros. Grain Company, of Baltimore, Md., which went into bankruptcy nearly two years ago, will take place the latter part of this month on the old indictments charging them with having conspired to defraud the First National Bank of Baltimore out of \$70,000 in bogus bills of lading for grain. A very great interest is being shown by the trade in this case.

The closing golf game of the season between the "High Brow" grain shippers and the "Yannigan" vesselmen took place at Exmoor Country Club the latter part of September. W. H. Merritt of W. H. Merritt Company, Chicago, carried off the honors for his excellent work among the shippers, and Arthur Sullivan took the first prize among the Yannigans. It was the last of five games that have been played over different courses during the season.

At the joint session of the Legislative Bureau and Economy Commission at Springfield, Ill., on September 26, preliminary steps were taken to bring under one roof all of the State departments and officials having offices scattered over the loop of Chicago. Senators and representatives who attended the session suggested that the move will eventually lead to the construction of a "little state house" in this city. Among the officers af-

fectured would be the Grain Inspection Department and the Railroad and Warehouse Commission which now occupy considerable space in the Insurance Exchange Building.

An indictment charging J. B. Sinnott, president, and Paul J. Orchard, secretary-treasurer, of the defunct Smith Bros. Company, of New Orleans, La., with unlawfully withdrawing collateral pledged to banks for loans, was recently returned by the grand jury. The receiver's statement to the court showed a deficit for the firm of over \$1,000,000. It is estimated the unsecured creditors will not receive over 25 per cent of their claims.

A new brokerage and jobbing firm has been established at 608 Kirby Building, Saginaw, Mich. A. H. Smith, of Jackson, Mich., who for years has represented the Huntley Manufacturing Company, and M. J. Conner, formerly with Henry M. Carr Company, are the members of the firm, and will handle hay, grain and beans. Their large acquaintance among dealers in the state and thorough knowledge of the business warrant the prediction of their success in the venture.

R. J. House, of the R. J. House Grain Company, of Kansas City, Mo., was expelled recently from membership in the Kansas City Board of Trade. The offense for which Mr. House suffered this penalty was mixing sand in the corn chop which he had been placing on the market the past year. He claimed, in acknowledging his guilt, that he was forced to put up that class of goods to meet competition. His practices were discovered by officials of the Kansas Feed Inspection Department.

RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, grain products, hay and seed at the leading receiving and shipping points in the United States for the month of September, 1913:

BALTIMORE.—Reported by James B. Hessong, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1913.	1912.	1913.	1912.
Wheat, bu.....	1,992,579	939,411	1,744,063	517,302
Corn, bu.....	278,518	152,638	11,560	8,413
Oats, bu.....	648,363	3,106,495	5,040	1,323,196
Barley, bu.....	3,782	1,203	.....	.....
Rye, bu.....	94,049	13,801	25,829	.....
Hay, tons.....	4,251	3,916	597	560
Flour, bbls.....	216,898	165,295	119,639	17,009

BUFFALO.—Reported by the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1913.	1912.	1913.	1912.
Wheat, bu.....	13,347,083	12,624,004	.....	.....
Corn, bu.....	2,776,335	2,500,076	.....	.....
Oats, bu.....	2,201,832	428,000	.....	.....
Barley, bu.....	2,943,520	1,119,906	.....	.....
Rye, bu.....	429,800	312,500	.....	.....
Flax seed, bu.....	1,278,702	.....	.....	.....
Flour, bbls.....	1,478,035	926,184	.....	.....

CHICAGO.—Reported by J. C. F. Merrill, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1913.	1912.	1913.	1912.
Wheat, bu.....	4,307,000	7,363,800	5,866,000	6,043,900
Corn, bu.....	15,205,000	12,426,050	8,212,000	8,124,750
Oats, bu.....	12,930,000	17,673,600	8,630,000	14,084,100
Barley, bu.....	2,167,000	1,459,500	369,000	137,500
Rye, bu.....	367,000	298,800	104,000	110,700
Timothy seed, lbs.	5,947,000	6,874,600	3,735,000	7,503,900
Clover seed, lbs.	188,000	271,000	138,000	140,500
Other grass seed, lbs.	1,334,000	2,297,800	2,181,000	2,544,700
Flax seed, bu.....	31,000	196,900	2,000	17,700
Broom corn, lbs.	1,024,000	1,564,800	1,455,000	611,100
Hay, tons.....	25,647	29,546	2,761	1,910
Flour, bbls.....	936,000	674,361	624,000	794,585

DETROIT.—Reported by M. S. Donovan, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1913.	1912.	1913.	1912.
Wheat, bu.....	123,000	38,000	131,000	.....
Corn, bu.....	200,800	217,000	41,300	112,700
Oats, bu.....	364,200	503,000	80,000	91,700
Barley, bu.....	3,000	.....	.....	.....
Rye, bu.....	105,000	7,000	35,700	.....
Flour, bbls.....	28,800	22,488	36,000	29,800

CLEVELAND.—Reported by M. A. Havens, secretary of the Chamber of Commerce.

Articles.	Receipts by rail.		Shipments.	
	1913.	1912.	1913.	1912.
Wheat, bu.....	61,941	7,081	71,561	69,117
Corn, bu.....	294,821	724,944	90,617	210,483
Oats, bu.....	293,100	510,226	51,736	281,440
Barley, bu.....	7,141	4,618	.....	.....
Rye, bu.....	6,565	1,692	8,221	.....
Flax seed, bu.....	205	7,349	.....	3,009
Hay, tons.....	5,212	6,241	900	2,104
Flour, bbls.....	58,272	76,111	36,275	19,612

DULUTH.—Reported by Chas. F. MacDonald, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1913.	1912.	1913.	1912.
Wheat, bu.....	17,517,000	17,412,000	11,415,000	13,940,000
Corn, bu.....	42,000	.....	42,000	.....
Oats, bu.....	2,398,000	895,000	1,313,000	702,000
Barley, bu.....	4,569,000	2,140,000	3,341,000	1,523,000
Rye, bu.....	516,000	613,000	285,000	515,000
Flax seed, bu.....	470,000	229,000	1,237,000	258,000
Flour, bbls.....	815,000	889,525	843,305	960,325
Flour products.....	116,035	.....	.....	.....

CINCINNATI.—Reported by W. C. Culkins, superintendent of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1913.	1912.	1913.	1912.
Wheat, bu.....	674,878	408,586	336,035	196,422
Corn, bu.....	639,332	733,450	233,731	268,554
Oats, bu.....	853,974	1,211,754	638,899	588,844
Barley, bu.....	66,585	14,906	28	1,994
Rye, bu.....	63,710	85,730	49,183	18,250
Timothy seed, 100-lb. bags.....	9,162	15,093	10,833	6,628
Clover seed, 100-lb. bags.....	2,370	3,947	1,227	708
Other grass seed, 100-lb. bags.....	15,510	23,106	8,929	12,740
Flax seed, 100-lb. bags.....	41	35	10	.....
Broom corn, lbs.....	16,200	29,849	157,077	3,520
Hay, tons.....	24,716	9,451	13,826	3,311
Flour, bbls.....	117,238	123,965	85,668	108,114

GALVESTON.—Reported by John H. Upschulte, chief inspector of the Cotton Exchange and Board of Trade.

Articles.	Receipts.		Shipments.	
	1913.	1912.	1913.	1912.
Wheat, bu.....	604,000	1,871,000	1,020,840	1,981,600
Corn, bu.....	32,000	18,000	.....	.....
Oats, bu.....	5,000	35,000	.....	.....
Rye, bu.....	28,000	19,000	.....	.....
Flour, bbls.....	.....	.....	17,060	15,511

INDIANAPOLIS.—Reported by Wm. H. Howard, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1913.	1912.	1913.	1912.
Wheat, bu.....	120,000	200,000	82,000	59,000
Corn, bu.....	1,384,000	1,115,000	211,000	124,000
Oats, bu.....	308,000	1,286,000	215,000	360,000
Rye, bu.....	10,000	8,000	1,000	.....
Hay, cars.....	232	81	.....	.....
Flour, bbls.....	60,000	31,000	.....	.....

KANSAS CITY, MO.—Reported by E. D. Bigelow, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1913.	1912.	1913.	1912.
Wheat, bu.....	2,311,200	7,933,200	2,070,000	5,306,400
Corn, bu.....	1,756,250	616,250	920,000	465,000
Kafir corn, bu.....	30,000	61,600	28,000	44,000
Oats, bu.....	1,076,100	693,600	821,800	481,100
Rye, bu.....	154,000	15,400	77,000	11,000
Barley, bu.....	47,600	5,600	5,600	2,800
Flax seed, bu.....	2,000	9,000	1,000	2,000
Eran, tons.....	1,620	2,040	11,100	3,740
Hay, tons.....	21,284	27,360	6,444	4,296
Flour, bbls.....	12,500	32,250	238,500	240,250

MILWAUKEE.—Reported by H. A. Plumb, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1913.	1912.	1913.	1912.
Wheat, bu.....	1,122,400	2,106,000	107,100	83,800
Corn, bu.....	1,156,400	971,040	771,985	616,311
Oats, bu.....	2,451,600	2,345,400	1,758,723	1,192,295
Barley, bu.....	1,745,900	1,440,400	239,898	312,221
Rye, bu.....	387,400	403,700	116,139	137,071
Timothy seed, lbs.	150,000	522,650	271,385	69,000
Clover seed, lbs.	13,375	123,305	33,150	.....
Flax seed, bu.....	9,600	24,000	.....	.....
Hay, tons.....	2,976	3,410	960	108
Flour, bbls.....	323,930	275,000	339,590	321,064

MINNEAPOLIS.—Reported by H. W. Moore, statistician of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1913.	1912.	1913.	1912.
Wheat, bu.....	16,283,670	13,828,710	3,322,220	3,552,620
Corn, bu.....	330,660	229,420	252,940	119,830
Oats, bu.....	3,764,630	2,052,890	2,144,740	1,353,910
Barley, bu.....	6,630,320	4,186,200	3,958,890	3,204,350
Rye, bu.....	1,056,610	1,085,230	650,850	599,590
Flax seed, bu.....	756,310	699,870	75,444	133,970
Hay, tons.....	756,090	3,310	2,330	400
Flour, bbls.....	66,538	74,175	1,686,635	1,539,044

MONTREAL.—Reported by George Hadrill, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1913.	1912.	1913.	1912.
Wheat, bu.....	3,492,456	3,098,755	3,080,695	3,000,068
Corn, bu.....	22,000	.....	.....	.....
Oats, bu.....	770,323	1,805,052	552,567	1,536,990
Barley, bu.....	505,030	218,814	453,063	168,466
Rye, bu.....	77,999	45,975	.....	.....
Flax seed, bu.....	1,747,475	25,850	2,000,261	.....
Hay, bales.....	40,639	140,087	28,903	104,925
Flour, sacks.....	239,136	239,066	327,106	238,974

NEW YORK.—Reported by H. Heinzer, statistician of the Produce Exchange.

Articles.	Receipts.		Shipments.	
	1913.	1912.	1913.	1912.
Wheat, bu.....	3,499,000	.....	2,616,129	.....
Corn, bu.....	575,775	.....	75,207	.....
Oats, bu.....	1,322,900	.....	1,235,635	.....
Barley, bu.....	82,875	.....	116,882	.....
Rye, bu.....	2,300	.....	.....	.....
Timothy sd. bags.....	.....	.....	2,002	.....
Clover seed, bags.....	1,887	.....	1,441	.....
Flax seed, bu.....	310,000	.....	404,000	.....
Hay, bales.....	32,674	.....	7,292	.....
Flour, bbls.....	874,100	.....	391,110	.....

OMAHA.—Reported by F. P. Manchester, secretary of the Grain Exchange.

Articles.	— Receipts —		— Shipments —	
	1913.	1912.	1913.	1912.
Wheat, bu.....	1,264,800	2,040,000	1,407,600	1,957,200
Corn, bu.....	1,867,200	922,800	1,842,500	892,100
Oats, bu.....	1,711,500	1,492,600	1,783,500	1,137,000
Rye, bu.....	50,600	8,800	77,000	7,000
Barley, bu.....	22,400	74,200	5,000	6,000

ST. LOUIS.—Reported by the Merchants' Exchange.

Articles.	Receipts		Shipments	
	1913.	1912.	1913.	1912.
Wheat, bu.....	1,816,827	4,345,495	2,082,490	2,827,870
Corn, bu.....	1,353,225	1,650,710	633,180	942,520
Oats, bu.....	2,424,100	2,283,650	1,608,310	1,408,330
Barley, bu.....	182,634	246,400	17,460	
Rye, bu.....	75,900	48,688	60,170	21,405
Hay, tons.....	28,025	21,690	14,770	11,885
Flour, bbls.....	337,255	301,610	422,200	286,545
Bran, sacks.....	114,390	103,550	377,200	268,789

SAN FRANCISCO.—Reported by T. C. Friedlander, secretary of the Grain Trade Association of the Chamber of Commerce.

Articles.	Receipts		Shipments	
	1913.	1912.	1913.	1912.
Wheat, ctls.....	447,574			
Corn, ctls.....	2,250			

Oats, ctls.....	102,673	12,020
Barley, cts.....	336,121	174,181
Rye, cts.....	1,380	
Hay, tons.....	13,151	847
Flour, bbls.....	80,072	24,990

TOLEDO.—Reported by Archibald Gassaway, secretary of the Produce Exchange.

Articles.	Receipts		Shipments	
	1913.	1912.	1913.	1912.
Wheat, bu.....	535,000	673,000	200,900	186,600
Corn, bu.....	242,000	328,000	30,700	32,200
Oats, bu.....	412,800	1,443,500	401,900	940,300
Barley, bu.....		1,000		1,000
Rye, bu.....	16,000	108,500	15,700	
Timothy sd., bags	5,889	8,762	2,261	11,747
Clover seed, bags	7,912	6,320	2,560	673
Alsike seed, bags	459	720	23	676

put into the harp attached to pole and is ready for service, and this is all the lubrication that is required for the life of the wheel. In the majority of cases we use the bushing over again on the second wheel. We have an air press for forcing these bushings in and out of wheel. During the past sixteen years we have done considerable experimenting in trolley wheels and lubricants with different kinds of trolley wheels and different kinds of lubricants, and it has been our experience that the Dixon Graphite Cup Grease No. 2 is the very best lubricant that can be obtained for this purpose. On trial equipments we have operated trolley wheels for seven and eight thousand miles; however, in figuring up our average mileage on trolley wheels by the year, taking into consideration wheels that are lost, broken and in some cases stolen, our average mileage is approximately 4,000 miles."

TRADE NOTES

Recent foreign orders received by the Wolf Company of Chambersburg, Pa., included a large grain elevator equipment to go to Argentina.

The Gilbert Hunt Company of Walla Walla, Wash., it is reported, will establish a plant at Medicine Hat, Alberta, for the manufacture of feed mills, and farm machinery.

The D. D. Weschler Malting Machinery Company of Milwaukee, Wis., has been incorporated with a capital stock of \$25,000. The incorporators are George D. Weschler, Willett M. Spooner, and Charles B. Quarles.

A business man in India has written an American consul that he is keenly interested in rice hulling and is daily pressed for information about a small hand mill, costing no more than \$162, which could be installed in every village. For particulars address File No. 11,605, Bureau of Foreign and Domestic Commerce, Washington, D. C.

The American Machinery Company, of Port Huron, Mich., is placing on the market a new American Special Self-Trimming Grinder, with 21-inch plates. The new grinder is larger and about 800 pounds heavier than any now built by the company, and is designed especially for extra heavy screenings and feed grinding where a capacity better than three and one-half tons per hour is required.

David Lloyd Owens, treasurer of the American Grain Separator Company, of Minneapolis, Minn., passed away recently at 50 years of age. Mr. Owens was born at Cambria, Wis., in 1862, and removed to Minneapolis in 1878. He was formerly a member of the J. L. Owens Company, but four years ago with an older brother he organized the American Grain Separator Company. He leaves a wife, four brothers and two sisters.

John S. Metcalf Company, Ltd., constructing engineers, Montreal and Chicago, have been awarded a contract by the Department of Public Works of the Dominion Government, Ottawa, Ontario, for approximately half a mile of grain shipping conveyor galleries at Berths Nos. 5 and 6, Sand Point, West St. John, N. B. Approximate cost \$135,000. The company has also been awarded a contract by the Canadian Pacific Railway for extension of the Glen Arch at Westmount, Montreal, Quebec, to provide for a width of four tracks. The estimated cost is \$50,000.

The Hess Warming and Ventilating Company of Chicago, Ill., has received a contract for the large drier to be installed at the new transfer elevator of the Michigan Central Railroad, now being constructed by Witherspoon-Englar Company. This drier, when completed, will be larger than any drier in Chicago, and, with the exception of the Hess Drier at the Kentucky Public Elevator, at Louisville, will be the largest drier in the world. It is expected to have the new apparatus ready for use by January 1. The Hess Company also have the contract for a drier and cooler of 15,000 bushels daily capacity to be installed at the Merritt Elevator in South Chicago recently taken over by Norris & Company of Chicago. This drier will be fitted with a special engine and two new legs so that it may be run independently of the machinery of

the elevator. The drier will be ready for operation December 1.

Roy Becker, who has represented a grain publication for the past three years, is now identified with the Seed Trade Reporting Bureau in the capacity of advertising manager. The rapid growth of the Seed Trade Reporting Bureau letter among the seed trade of America and Europe, the establishment of a display advertising department, and the increasing amount of business handled by this firm, has made this increase in their staff necessary. Mr. Becker will also aid in the promotion of the use of the Official Brown-Duvel Moisture Tester which is manufactured and sold by the firm, as well as their other lines of grain elevator supplies and machinery.

Interesting, crammed full of information and decidedly novel in many respects is the recently issued catalogue of the Charter Gas Engine Company, Sterling, Ill., describing the Charter "Type R" Oil Engines. The illustrations are clear and striking and the matter is splendidly arranged for the purpose of setting forth all the merits of this well known line of oil engines. The development of the oil engine is discussed and each essential part is explained and pointed out by arrows on a large, double page view of the "Type R" engine. Inasmuch as the theory and operation of the oil engine is still very vague in the minds of many would-be users, this catalogue should serve a very useful purpose in familiarizing them with the ease and simplicity of operation as well as the low cost of running the engines. No one can read the catalogue thoroughly, examine the diagrams and peruse the explanations without acquiring some invaluable knowledge. It may almost be termed a text book as well as a catalogue. Then there are views showing typical installations of the Charter "Type R" Oil Engines and a number of testimonials from satisfied users covering a great part of the twenty-five years that Charter Engines have been on the market. As the manufacturers put it, "actual service is the only real test of an engine," and to judge by the letters received many of these engines have been receiving the hardest kind of service and operating efficiently under all conditions. The catalogue is well worth reading and will be sent to anyone interested upon request.

The Joseph Dixon Crucible Company of Jersey City, N. J., received a very interesting testimonial letter recently from Fred Heckler, superintendent of the Lake Shore Electric Railroad Company, of Fremont, Ohio, covering the question of trolley lubrication. Mr. Heckler's letter stated: "In reference to your Graphite Cup Grease No. 2, which we are using on our trolley wheels, we have been using this for the past four or five years for trolley lubrication. We manufacture our own trolley wheels and they are so constructed that we have an extra large chamber for lubricant. We use a graphite bushing for a 5/8-inch pin 2 inches long only. We take the Graphite Cup Grease No. 2 and thin it slightly with oil, making it somewhat thinner in the winter than in the summer. This lubricant is then forced into the chambers of the wheel with a force pump in our shop and the wheel is then

SOME ADVANTAGES OF LINING GRAIN CARS

The modern grain shipper is as far advanced in his methods today as the auto truck is over the dray horse of yesterday. Grain machinery is as nearly perfected as engineering skill and inventive faculty can bring it to, and yet the silent but powerful factor of leaky cars reduces the shipper's profit many dollars during the crop year; one reason being the fact that railroad stock never was in poorer condition than it is today.

There have been brought forward a number of methods to combat this condition, most of which have proved ineffectual. The introduction of the Kennedy Car Liner, however, by the Kennedy Car Liner and Bag Company, Shelbyville, Ind., has solved the problem for many grain dealers and these liners are now advantageously used in all sections of the country.

The Kennedy Car Liners stop the leaks that otherwise can not be stopped, sometimes can not even be seen or found. It is asserted that they have found so much favor that sales this season reached a greater total than all the previous sales since they were put on the market. The liners furnish the shipper a maximum protection at the minimum cost, for a car equipped with one of them is leak-proof, besides obviating the necessity and trouble of filing shortage claims.

The liners are of various types suitable for all cases of suspicious leaky cars, i. e., Kennedy Standard Liners for cars in general bad order, Kennedy End Liners for cars with defective ends and Kennedy Grain Door Liners to furnish protection at the grain doors, the paper being so reinforced as to be securely effective. Either type of liner is readily installed, saves many hours consumed in cooping dilapidated box cars and insures grain while it is in motion and out of your sight. It is unnecessary to add that they are just as necessary for grain protection as a fire insurance policy.

UNIFORM ELEVATOR RECORDS

The Railroad Commission of North Dakota has recently deputized Walter Thompson, a newly appointed member of the state examining board of certified accountants, to formulate a standard system of elevator accounting suitable for use in all grain elevators of the state. The need of a uniform system has been very urgent, as the work entailed by the Commission in keeping its record of the elevators has been arduous and often unnecessary.

The form which will be drawn up will be adaptable to all elevators, and will greatly simplify matters when disputes arise between elevators and the railroads in questions of freight rates and hauling. These forms will be submitted to all bulk grain handlers and their general use will be urged.

As in the use of all such forms where interstate differences are sometimes involved, a degree of uniformity should be attained with that in use in neighboring states, and it is reported that Mr. Thompson has in mind a plan which will comply in all respects with the demands of the grain men, the carriers, and the state.

NEWS LETTERS

CINCINNATI

BY JOHN S. DOBBS.

Several changes in the makeup of our grain trade have taken place since your last issue. Parker Gale has retired from the firm of Stafford & Gale and is now connected with Ellis & Fleming.

Harry Niemeyer, who for a long time was connected with the Cincinnati Grain Company, has succeeded Mr. Gale and is now associated with Mr. Stafford and the firm name has been changed to the Stafford Grain Company, with offices in the new Chamber of Commerce Building.

Walter Draper, president of the Chamber of Commerce, has just returned from a trip abroad, where he combined business with pleasure, and from his appearance it is to be judged that he had a very good time.

Edward A. Fitzgerald, of the Fitzgerald Brothers Company, has returned from a short business trip in Indiana and Illinois and reports a large attendance of grain dealers at the recent meeting held at Danville, Ill.

Pliny Gale has been touring Indiana with Bert Boyd of Indianapolis in a machine, and claims to be an apt pupil of Mr. Boyd's in sleight-of-hand tricks.

At a recent meeting of the Hay and Grain Association, F. F. Collins was appointed a delegate to represent the Cincinnati market at the New Orleans convention. W. C. Culkins goes as a representative of the Chamber of Commerce, and the local trade members are hoping for the success of these two delegates in bringing the next meeting of the National Association to Cincinnati.

CLEVELAND

BY JOHN D. RARIDAN.

Cleveland grain dealers are elated at the outlook for Canadian oats and for the first time in history, shipments will reach the local market in great volume. Several cargoes are due the middle of October, and there is quite a scramble among dealers to secure transportation facilities until navigation closes. This activity follows President Wilson's acceptance of the new tariff rate reducing the duty on Canadian oats from thirteen to six cents a bushel.

The Lake Shore Elevator Company is constructing a chicken feed mill, to be the most modern in the state. Other improvements are under way in the prospect of a gain in business next spring.

The Cleveland Grain Company, since taking over the Big Four elevator at Cincinnati, is centering all its southern business there. Improvements on the plant are proposed for the near future.

Sheets Bros. Elevator Company has under course of construction a new chicken feed mill and several additional buildings.

The Cleveland Milling Company received 117,000 bushels of Northern wheat when the steamer *Brazil* docked from Duluth, Tuesday, October 7. Before lake navigation closes the company expects 500,000 bushels of wheat for winter use. Last year's consumption at the local elevator was 1,600,000 bushels, the yield from approximately 120,000 acres. To date the 1912 volume has been exceeded by 21 per cent.

Grain business on Lake Erie will break all records this year, exceeding the high mark of 1912, according to figures of the Lake Carriers' Association. Scarcity of boats caused considerable flurry among dealers and delay at several ports.

Dr. E. B. Jacobs, living on a homestead twenty miles south of Fort Morgan, Colo., has made a record of raising 1,400 bushels of No. 1, winter wheat on a little less than an 80-acre tract. He formerly lived in Findlay, O.

The wheat production in Ohio for the season shows a big improvement over that of 1912, according to the October report of the State Agricultural Commission. The total production aggregates 27,297,467 bushels, more than double the 1912 output.

The total acreage of wheat is 1,654,497, the production per acre being seventeen bushels with the quality 96 per cent. There was an enormous crop of oats, the production being 44,950,805 bushels, the average yield per acre 28 bushels with the quality 90 per cent.

INDIANAPOLIS

BY F. J. MILLER.

Except for corn, grain shipments on the local market have been even lighter in the last month than during the same month last year, when, in spite of the bumper crops, the shipments did not cover as many weeks as had been the case the year before. An indication of the increase in corn shipments during the last month is found in the fact that the Board of Trade recorded 200,000 bushels more than in 1912. Oats, however, showed only 205,000 bushels, as compared with 857,000 bushels a year ago, and only 85,000 bushels of wheat were recorded. The record the year before was 163,000 bushels.

Weather conditions and short crops were often the explanation, but the most important reason is that less of these grains has been produced and shipped simply because the farmers have devoted less acreage to them.

Bert H. Boyd, president of the Indianapolis Board of Trade, is the official delegate of the organization to the annual convention of the Grain Dealers' National Association at New Orleans this month. He will be accompanied by about fifteen other Hoosiers, including C. B. Riley, secretary of the Indiana Grain Dealers' Association.

E. K. Shepperd is the delegate to the National Council of Farmers' Co-operative Associations at Des Moines, Iowa, the 21st of this month; and James M. Brafford, Harry J. Berry and Samuel A. Holder will be the official representatives of the Indianapolis men at the government hearing on grades of grain at Washington October 29.

KANSAS CITY

BY MURRAY E. CRAIN.

The grain business has been extremely quiet in Kansas City during the past few weeks, with receipts light and outward movement below normal. Stocks on hand are the largest of any within the past five years. Receipts are light because of the failure of growers to look with favor on the prices now being registered. Wheat is quoted at 76 and corn at 84 at present. Farmers are inclined to hold their wheat for more favorable prices. This means that receipts will continue to be below normal for some time. Most of the elevators around Kansas City are loaded to the guards with wheat. Movement of oats is fair, while corn is in good demand, though not highly active.

A straw vote taken by the Kansas City Board of Trade resulted in a majority of the members registering in favor of moving to the new Lathrop Building at Tenth and Grand Avenue. The change, however, will not be made for at least three years. The Board of Trade has a lease of that term on its present structure at Eighth and Wyandotte and could not easily dispose of it. The move to new quarters, however, will eventually take place, the present ones being inadequate for the expanding activities of members of the Board of Trade. If the Lathrop Building, now under course of construction, were taken, the entire structure would be leased, giving the Board of Trade quarters in the heart of the retail business district. This is not necessary, and the organization will go slowly in deciding on the change.

Individuals and corporations of Kansas are contributing liberally to a seed wheat fund for Kansas farmers, who are in bad shape in this respect. Thousands of dollars are being donated, the Kansas City Board of Trade giving \$2,300 through its members. The contributions were as follows: Aylesworth-Neal-Tomlin Grain Company, \$100; Benton Grain Company, \$50; Brodnax & McLiney, \$100; Bulte Mill, \$50; A. C. Davis & Co., \$50; Ernst-Davis Grain Company, \$50; F. E. Essex, \$100; E. D. Fisher Commission Company, \$100; Fox-Miller Grain Company, \$50; John I. Glover, \$100; Goffe & Carkener, \$100; Hall-Baker Grain Company, \$100; Ismert-Hincke Milling Company, \$50; Kemper Grain Company, \$100; Kemper M. & E. Company, \$50; Logan Brothers Grain Company, \$50; Lonsdale Grain Com-

pany, \$100; Moore-Lawless Grain Company, \$50; Murphy Grain Company, \$50; Neola Elevator Company, \$100; Norris Grain Company, \$100; Roahen-Cary Grain Company, \$50; Shannon Grain Company, \$50; Simonds-Shields Grain Company, \$100; Smith-Mann Grain Company, \$50; Southwest Milling Company, \$50; H. H. Steel & Co., \$50; Terminal Elevator, \$100; Thresher-Fuller Grain Company, \$100; Vanderslice-Lynds Company, \$100, and Zenith Milling Company, \$50.

H. G. Wilson, Transportation Commissioner of the Board of Trade, the Commercial Club and other Kansas City organizations, has been particularly busy protecting the interests of the grain trade recently. A number of cases of importance are scheduled to come up in the near future, and Mr. Wilson will probably make trips to Washington and other points. He has received notice that the final hearings on the bill of lading question will be held in Washington on October 30, instead of October 15, as originally set. Mr. Wilson will attend the session before the Interstate Commerce Commission. As the representative of the Kansas City Board of Trade he will take the position that bills of lading should be designated as negotiable paper instead of merely assignable paper, as has been contended in other quarters.

The Kansas City Board of Trade probably will file within the near future complaints against the Chicago, Burlington & Quincy and the Missouri & Pacific railroads, both of which have advanced grain rates from Nebraska points to Kansas City without making corresponding increases to other points or on other commodities. The case is now being considered by the Transportation Bureau of the Board of Trade, which has asked authority to file against the roads mentioned.

A case now pending before the Interstate Commerce Commission is the complaint of the Board of Trade against roads operating between this city and Memphis, Tenn. The rates are generally unsatisfactory and the Board of Trade is seeking adjustment.

Grain men of Kansas City are much interested in a newspaper story which has been treated humorously by the press. It refers to a statement made by E. A. Faust, chairman of the crop improvement committee of the United States Brewers' Association. Mr. Faust takes the attitude that the demand for beer far exceeds the supply and that a famine will result unless production of malt and barley is increased. The barley crop in Kansas and Missouri was light this year. Agriculturists might take a hint from the situation and put more acreage to malt and barley than in the past. Such movements are usually simultaneous, however, and result in over-production. Grain men believe that farmers who watch the situation closely can easily clean up annually by raising crops which are in greatest demand.

Grain men will be affected to a great extent by the income tax feature of the tariff bill, recently signed by President Wilson. A Kansas City newspaper listed the individuals whose annual incomes run above the \$40,000 mark. According to this table, H. L. Hall, of the Hall-Baker Grain Company, receives a yearly revenue of \$75,000. E. W. Shields, of the Simon-Shields Grain Company, is no worse off, also having an annual income of \$75,000. Many other grain men of Kansas City enjoy incomes well above the \$3,000 figure and will necessarily contribute to Uncle Sam's exchequer.

Railroads running into Kansas City from points in Missouri are trying to evade the rates published only a short time ago. The Board of Trade is pressing the case vigorously and already has gained two points, by admission of the railroads themselves. The point now to be decided is whether the rates on grain published shall apply where the delivery point is in Kansas City, Kan. There is no doubt but that they will be put into force where deliveries are made in Kansas City, Mo.

Donald Moffatt, a grain man of Kansas City, has transferred his seat on the Board of Trade to Finley Barrell, of Chicago. Mr. Moffatt will continue in business, being connected with his father.

A fair-sized delegation of Kansas City grain men left Kansas City recently for New Orleans to attend the annual convention at that point. George Aylesworth, of the Aylesworth-Neal-Tomlin Grain Company, was the official delegate of the Board of Trade. A good deal of regret attaches to the failure of more Kansas City grain men to attend annual conventions of the National. Despite the fact that Kansas City is one of the most important terminal markets in the country, attendance at the national meetings has left something to be desired.

A visitor of note to Kansas City recently was J. Sopwith, of London, England, who is studying American methods of handling grain. Mr. Sopwith

visited most of the elevators around Kansas City and evinced much interest in the grain-carrying equipment and other methods employed.

* * *

While grain men of Kansas City are hazarding guesses as to the condition of corn with reluctance, there seems to be no doubt but that the crop will be extremely light. Farmers are optimistic, however. This is indicated by the fact that no less than 10,000 automobiles have been sold in Kansas since March 1. The wheat crop was heavy and good, and the agriculturists are in no danger of leaving their lands, as reported in one or two instances.

* * *

Clifford Shofstall, a well known grain man of Kansas City, was married to Miss Helen Bernice Shedd, of Ashland, Neb., recently. The marriage came as a surprise to grain men, who thought that Mr. Shofstall was merely making a business expedition. The couple left for the West on an extended honeymoon immediately after the knot was tied. Mr. Shofstall is a son of W. M. Shofstall, of the Fowler Grain Company.

* * *

E. D. Fisher, head of the Fisher Commission Company, of Kansas City, is back at his offices after attending the funeral of his sister-in-law in Cleveland, Ohio.

* * *

R. J. House, owner of the Dixie Elevator in the eastern section of Kansas City, has lost his seat in the Board of Trade. Mr. House was accused of mixing glass sand with his corn chop. The Kansas State Grain Inspecting Department took action against House, forcing the issue.

* * *

Shall shippers be given authority to bring suit against railroads for a total of the overcharges since the passage of the maximum freight and two-cent passenger laws, or shall the liability be limited to \$10,000, the amount of each road's bonds? This is the question that is to be answered by Judge Smith McPherson in the railroad rate cases which recently were heard in Kansas City. Several million dollars are involved in the case and thirteen roads are interested. Shippers, including many grain men, are awaiting Judge McPherson's decision with more than casual interest.

PHILADELPHIA

BY E. R. SIEWERS.

The very latest acquisitions in membership of the Commercial Exchange includes the Walters Milling Company, with plant located at the southwest corner of Thirtieth and Market streets; John H. Kilpatrick & Company, 451 Bourse Building; the Erie Railroad Company, 411 Bourse Building; F. Warren, 1911 Market street, hay and grain; William B. Stiles, 426 Bourse Building, feed and grain, the son of A. Judson Stiles, who has associated himself with his father in the same line of business.

* * *

There was a sort of influx of prominent representatives of the grain trade from Baltimore that appeared somewhat in evidence on the grain floor and fraternized with the members quite recently, and among the most prominent were Samuel D. Thomas, the chief grain inspector of that port, with James K. Warren of the same city. They were in good company, being in charge of Captain John O. Foering, the chief grain inspector of Philadelphia, who has been studying up moisture conditions in grain and other important matters to the trade which he will discuss at New Orleans for the enlightenment of his organization. J. Collin Vincent, who is interested in the construction of a modern elevator for western Maryland, made a tour of inspection of the big Girard Point grain elevator now under construction here.

* * *

A large delegation of the flour and grain representatives attended the funeral of Wilson Welsh, who died suddenly of heart trouble at his residence in Lansdowne, aged 74 years. He was a former director of the Commercial Exchange, was born in Lancastershire, England, in 1839, engaging in the retail flour business at Frankford when 18 years old, and later on as a manufacturing miller at Thirtieth and Market streets, and at one time was the largest manufacturer of export flour in this city. He and his son, Walter M., were proprietors of the Fulmor Mill, near Hatboro, Pa., which the Eastern Milling Company absorbed.

* * *

George Raphael, formerly the oldest member of the Commercial Exchange and the only honorary member, died at his home in Beverly, N. J., of old age, being in his 94th year. He joined the original Corn Exchange Association in 1854 when Col. W. B. Thomas was president; John Derbyshire, treasurer; Samuel S. Witmer, vice-president, and William S. Pierie, secretary, and was a charter member. This association passing into the Commercial Exchange in 1868. He was born in Ireland and with his parents came here when a boy and grew up to be one of the leading export and import grain merchants

of Philadelphia. He was an authority on seeds and it was ever said of him that he was a "walking encyclopedia." He had a host of friends and became blind a year or two ago from physical debility.

* * *

President Antonio Sans appointed James L. King, Director Samuel Leech McKnight, director of the Commercial Exchange and chairman of the Grain Committee, with Secretary Frank Evans Marshall the official delegates to the Grain Dealers' National Association convention to be held in New Orleans. The first named gentleman is a director of the latter organization. Watson W. Walton, William P. Brazer, Director Walter Keen Woolman of the Grain Committee and other leaders in the grain trade here are expected to be in attendance.

* * *

The Corn Trade Exhibition, which will be held on the main floor of the Bourse, in which \$1,250 as prizes will be awarded for the best specimens of the different varieties of corn raised in Pennsylvania, Delaware, Maryland and New Jersey, including a boys' corn exhibit, to be held in December, is attracting much attention from the trade and the farmers.

TOLEDO

BY E. F. BAKER.

The wheat production throughout the state of Ohio, contrary to expectations, showed a big improvement over the receipts of the preceding year. According to the October report sent out by the State Agricultural Commission, issued last week, the total production of wheat for this year aggregated 27,297,467 bushels, which is more than double the output for 1912. The total acreage of wheat was 1,654,497, the production per acre being 17 bushels. There was an enormous crop of oats, the production being 44,950,805 bushels, the average yield per acre being 28 bushels with the quality 90 per cent of an average.

The Ohio corn crop was one of the best ever known in the state and it is a fact not generally known that some of the very best corn in the world is grown within a hundred miles of Toledo, which is truly a garden spot. Very little corn or, in fact, any grain, with the exception of oats, is being brought into the Toledo market at the present time. The greater share of the corn in this section has been cut and occasionally a little old corn finds its way into the Toledo market. Farmers have a good crop, however, and it is believed the movement will be heavy as soon as cooler weather comes. Out of 67 cars of corn, 22 graded No. 2 yellow; 7 No. 3 yellow; 19 No. 2 white; 8 No. 3 white; 6 No. 2 mixed; 5 No. 3 mixed; 3 yellow ear; and 2 sample.

Shipments during the past week amounted to 64,600 bushels of wheat, 10,700 bushels of corn, 128,500 bushels of oats. Receipts for the same period were 164 bushels of wheat, 80,000 bushels of corn, and 33,600 bushels of oats.

Toledo elevators are fairly well filled, but there will be plenty of elevator space this season to take care of the products, it is believed, owing to the additional space provided this year. A large cargo of about 300,000 bushels of oats is expected into the Toledo port from Canada next week, most of which will be stored in the tanks of the East Side Iron Elevator.

* * *

Walter Moore, of Santa Fe, Ohio, when arraigned before Mayor Prall, of Bellefontaine, charged with stealing clover seed, admitted the charge with the statement: "I never told a lie in my life and I'm not going to begin now. I am guilty of the charges." The modern George Washington is 26 years old and was arrested in Lorain, where he fled after hearing that a warrant had been issued for him.

* * *

Twenty-five representative farmers of Montgomery county recently formed a unique organization having for its object the binding together in closer relationship of farmers and townspeople. The constitution makes a place on the board of control for city members whose interests are identified with farm life. Otherwise it is the intention of the association to proceed with the improvement of the various sections of the county in a manner similar to the means employed to improve parts of the city by the different improvement associations. John Collins, chairman of the agricultural committee of the Chamber of Commerce, presided over the meeting.

* * *

The new Agricultural Commission is planning to help Ohio farmers in securing adequate labor for farm purposes and also to bring farmers to abandoned Ohio lands by the establishment of an immigration and agricultural employment bureau on Ellis Island, N. Y.

* * *

E. W. V. Kuehn, formerly a prominent Toledo grain dealer, has returned from a tour of Europe made in the interest of the International Bible Students' Association. Mr. Kuehn was accompanied by

Pastor Russell, of the Brooklyn Tabernacle, and other members of the association.

* * *

Director T. P. Riddle, of the State Board of Agriculture, has completed arrangements for the transportation of the 2,100 boy and girl corn-growing experts of Ohio to Washington and Philadelphia in December. There are 2,000 boys and 100 girls who will leave for the national capital December 1 in special trains leaving Toledo, Cleveland, Van Wert, Ohio, and Union City, Ind. President Wilson will address the juvenile corn growers at Washington, and at Harrisburg they will be received by the Governor of Pennsylvania. A tour of a real battleship will be one of the features of the visit to Philadelphia.

* * *

The big steel stack of the Defiance Grain & Milling Company, Defiance, Ohio, was blown down during a severe windstorm Oct. 2, striking the transmission wires from the Auglaize River power dam into the central station of the Defiance Gas and Electric Company. Practically every industry in the city was closed down for a half hour until the big stack could be moved and the damage repaired.

* * *

The annual meeting of the Miami Valley Grain Dealers' Association was held at the Phillips Hotel in Dayton recently. About half a hundred members were in attendance. Features of the proposed government standard for the grading of grain were discussed at length and general trade problems came up for consideration. A big feature of the affair was the noon-day dinner and the social feature is considered one of the big things in this meeting, as it is believed that friendship will go far toward harmonizing business relations. The meeting was attended by State President Eikenberry, of Camden. The officers elected were: J. E. Wells, Quincy, president; E. T. Custenborder, Sidney, secretary; J. W. Simmons, Pemberton, treasurer.

* * *

"Big Chief" E. H. Culver and wife, E. L. Southworth, Jesse Young, of the Toledo Grain & Milling Company, and wife, Fred Mayer, of J. F. Zahm & Co., and wife, and Joe Doering, of the People's Elevator Company, of Antwerp, have left for New Orleans to attend the National Convention.

BUFFALO

BY ELMER M. HILL.

Judge John R. Hazel of United States Court for the western district of New York has reserved decision on the contempt of court proceedings brought by the Chicago Board of Trade against Henry C. Tucker and George W. Tucker, Buffalo grain and stock brokers, for alleged violations of an injunction granted eight years ago prohibiting the use of the Chicago Board of Trade quotations on grain and grain products.

It is alleged that the Tucker brothers have conspired to defeat and evade the injunction obtained when they were operating under the name of the Consolidated Stock Exchange of Buffalo, by organizing and engaging in the brokerage business under the name of Paul Lambert & Co., and that this firm is fictitious and assumed. It is further alleged that the Tucker brothers supplied quotations to their 50 branches in the United States and Canada in violation of the injunction.

It is maintained by the complainants that the Tuckers have secured and maintained telegraph wires running from their main office in the Elliott Square, Buffalo, to their many branch offices and these wires are alleged to be used exclusively between the hours of 9:30 a. m. and 2:30 p. m. each business day for the purpose of carrying quotations issued by the Chicago Board of Trade.

Testimony has been taken in Pittsburgh and other cities where the Tuckers have offices and this testimony is now being considered by the court. It may be some time before a decision is handed down.

* * *

Shortage of cars at the port of Buffalo is delaying grain carriers, with the result that vessels which have been arriving since the first of October are being held in port from three to five days and, in many instances, ships have been held here a week. Vessel capacity for prompt and future loading continues in good demand in the Lake Superior grain trade. Much time was lost by the downbound grain fleet during the early part of the month because of storms and thick weather in the vicinity of the Soo locks.

Practically all the vessels on the market for grain for early loading have been chartered at 1½ cents from the head of Lake Superior to Buffalo so that grain men are now forced to advance the rate to two cents in order to get tonnage. Storage room at Buffalo is in good demand at three cents but there are a number of boats on the market to hold winter cargoes at Port Huron and other Lake Erie side ports at that figure.

Operating expenses of the lake fleet were boosted on the first of the month when the wages of many

men were marked up. All men employed on vessels enrolled in the Lake Carriers' Association except licensed officers and stewards were advanced on October 1. The firemen, oilers, watertenders, wheelmen and watchmen are now being paid at the rate of \$65 a month and the wages of ordinary seamen were advanced from \$31.50 to \$40 a month.

Elevator room is scarce at Buffalo and this is one of the reasons why grain carriers arriving at this end of the lakes are being held in port longer than usual. Receipts last month averaged 4,000,000 bushels of grain a week so that receipts up to the tenth of the present month are more than 25,000,000 bushels in excess of the receipts for the corresponding period of last year.

Speaking before the membership committee of the Buffalo Chamber of Commerce a week ago, John A. Benschel, state engineer at Albany, N. Y., sounded a note of warning to Buffalo marine and elevating interests. He said that the Dominion government is spending \$40,000,000 in enlarging and otherwise improving the Welland canal, connecting Lakes Erie and Ontario, and the cities of Toronto and Montreal are spending \$15,000,000 in improving their harbor facilities. Continuing, he warned Buffalo interests that the Canadian marine and elevating interests are making an effort to wrest from Buffalo her prestige as a great lake port by taking the grain from the Canadian Northwest through the Welland canal direct to elevators in Toronto and Montreal for reconsignment to European ports.

The Clover Leaf Milling Company, which was destroyed by fire last month, has closed a deal with the assignee of the Victor Motor Truck Company to secure the large manufacturing plant formerly occupied by the Victor Company on the Military Road. The Clover Leaf Milling Company will establish its mills in this plant early next month. Manager F. D. Grubb says that the plans for the new plant have not yet been completed, but that he expects matters will be arranged before the latter part of October.

A new record per acre for a yield of oats in New York was established in East Aurora, Erie County, New York, last month, when Dr. A. L. Mitchell threshed the grain from a twelve-acre farm, getting 720 bushels, or 60 bushels to the acre. Old tillers of the soil maintain this to be a new record for the locality.

Members of the Buffalo Corn Exchange, officials of the Western Elevating Association, and grain men of the Chamber of Commerce and Board of Trade have received a letter from the division superintendent of the Lehigh Valley Railroad in Buffalo, N. Y., in which he stated that the autumn car shortage promises to be as serious as last fall and urges the Buffalo grain men to help handle the problem by conforming to these rules relating to grain cars destined for seaboard points in the East:

Place orders for cars with the station agent or other representative in writing.

Do not order cars in excess of immediate requirements.

Cancel orders promptly for any cars found not to be needed and give notice when, for any cause, cars will not be required at the time for which they were ordered but will be wanted on a subsequent date.

Do not order more cars for one day than are actually required for loading on that day.

Load cars as promptly as possible and to their full capacity.

Give disposition orders in advance of arrival of cars at elevators, when possible, and if it is not practical to do this, as quickly as they can after notice of arrival is received.

Do not take advantage of full free time allowed for loading and unloading, and give agents immediate notice when cars are made empty or of loading at elevators being completed.

Urge your customers in other towns and cities to load and unload cars as expeditiously as practicable.

Navigation over the Erie Canal between Buffalo and Albany for the season of 1913 will close on November 15. From the viewpoint of grain shippers and forwarding companies the season has not been a success. Numerous breaks during the opening months of the season had a tendency to frighten shippers, so that large shippers did not take chances on the canal but sent their grains through to Eastern seaboard points by rail. Rates on grain all season were a little higher than last season, and at the close 6 and 6½ cents will be paid for wheat from Buffalo to New York City.

Officials of the Buffalo Corn Exchange and Board of Trade have received a telegram from the Harbor Commissioners of the city of Montreal, Que., in which they state they have raised the rates for the handling and storage of grain. This, Buffalo grain merchants say, was done without seeking the opinion of the Montreal grain trade.

The change in tariff affects elevators No. 1 and 2 under control of the commission. Under the new rates it will cost approximately \$8 per car of 1,000 bushels including twenty days' storage and elevating ex-boat and placing it on a car exclusive of shovelling. At bay-ports like Kingston and Prescott, Ont., the same handling can be done at a cost of \$5 per car, or 60 per cent less than it costs at Montreal under the new rates. Buffalo grain mer-

chants say if this rate is allowed to exist, the trade will be diverted from Montreal to bay ports where cheaper handling is done.

The new charges as per schedule issued are:

On grain, ex-steamer or barge: elevating into elevator and weighing, three-tenths of one cent per bushel; delivery, three-tenths of one cent per bushel; storage in elevator up to twenty days, free.

On export grain, ex-cars: elevation, twenty days storage and delivery to ocean steamer over grain conveyor system, nine-tenths of one cent per bushel.

On domestic (Canadian) grains ex-cars: Oats, elevation and ten days' storage, one-half of one cent per bushel. All other elevation and ten days' storage, three-quarters of one cent per bushel. Deliveries will not be made in lots less than 1,000 bushels.

Storage: On all grains ex-steamer, barge or cars, after the expiry of free storage, one-quarter of one cent per bushel for each successive term of ten days or part thereof.

For other services: Loading on car, \$2 per car; for cleaning grain, one-half of one cent; turning grain, one-eighth of one cent per bushel.

Winter storage on grain: When charges at regular rates for storage amount to one and one-half of one cent per bushel on grain in store and received after November 15, no further charge for storage will be made until May 15, after which date the regular rate of storage of one-quarter of one cent per bushel for each succeeding term of ten days or part thereof will be charged.

At the request of the members of the Buffalo Corn Exchange, Chief Charles F. Marvin of the United States Weather Bureau has directed the bureau to send daily weather reports over a special wire from Washington to the Corn Exchange of weather conditions and indications in the corn belt of Iowa and southern Illinois. The first report was received on October 1 and will continue every business day until the last day in November. Next year and every year thereafter the reports will start on the first day of March. The reports are greatly appreciated by the members of the 'change, as they are now able to receive daily reports from the corn growing belt of the country. The data are shown on the United States weather charts on the 'change floor of the Chamber of Commerce.

J. M. Murphy Company, grain merchants, report that the price of cotton seed meal has raised from \$31 to \$34.50. The reason given for the big advance in price is the decrease in the cotton crop and trouble in the Southern cotton mills. There is prac-

tically no cotton seed meal on the market for delivery west of the Mississippi river.

There is an urgent demand for another grain elevator in the Buffalo harbor. Boats are being held in port from five to seven days in order to get to an elevator dock. Since the destruction by fire of the Erie Elevator, conditions here have been serious. The Washburn-Crosby Company are building concrete storage tanks to hold approximately 1,000,000 bushels of grain. These tanks replace the old Frontier Elevator, which had a capacity of a little less than 700,000 bushels.

Complaint is being made by merchants at the north end of Niagara Falls because a large amount of grain, taken from a sunken barge at Buffalo, has been brought to the Macklem malt house to be killed. An obnoxious odor is emitted by the grain which, merchants say, is very disagreeable.

More than 3,000,000 bushels of Canadian oats were in bond in Buffalo elevators when President Wilson signed the new Democratic tariff bill. The duty on oats being reduced from fifteen cents a bushel to six cents will mean a drop in the price of oats as well as other grains upon which the duty has been materially reduced. The H. O. Mills have been waiting for the tariff bill to be signed to buy their winter oats for oatmeal. For two weeks prior to the signing of the bill they were merely buying enough to keep the mills in operation and keep up on their orders.

The reduction of the duty on wheat from 25 cents to 10 cents a bushel is causing officials of the Washburn-Crosby Mills and other milling interests in Buffalo great joy. They declare that the reduction in the tariff will eventually lower the price of flour.

All of the Buffalo elevators are filled to their capacity. It is estimated that more than 10,000,000 bushels of grain, most of which is Canadian wheat, is now being held in the Buffalo elevators. The local grain market has been upset and there was practically no demand for grain, either American or Canadian, for two weeks before the tariff bill was signed, because grain buyers were of the opinion that the price would take a sudden drop as soon as the tariff was signed.

Receipts up to October 5 have been 102,745,000 bushels, an increase of 23,500,000 bushels over the corresponding period of last season. This is a new ten-year record. The figures were compiled by the Western Elevating Association and are considered official.

CRACKED KERNELS

Old Farmer John was much distressed,
And when we asked him, why?
" 'Twas 'corn,' " Old Farmer John confessed,
And passed on with a sigh.

We cursed the drought, and cursed the heat
That made John suffer so.
But the trouble was in Old John's feet,
The "corn" was on his toe.

The new book "Belting Records," published by the W. H. Salisbury Company of Chicago, omits the belting record that was made on us long ago when we were caught in swimming on a Sunday morning. And it was a record, all right.

Washed Ashore After the T-Party, Perhaps
[From "Milling" (Liverpool)]

The coming-of-age was last week celebrated of Mr. Arthur Harold Neal, son of Mr. and Mrs. A. W. Neal of the Mill, Butterwick . . . his health was proposed by Mr. T. Leafe, of Boston.

With a short buckwheat crop and maple syrup at a dollar per, you had better cultivate the fried mush habit.

Mr. Leake was publicity manager of the West Michigan State Fair. Well, why not? A publicity manager has no secrets.

W. H. Whitebread is not a baker, as you might infer, but deals in lumber and grain in Wapwallopen No. 2, Pa.

Brother Hank says he wishes Secretary McAdoo would advance him fifteen cents out of that \$50,000,000 so he could move his crop of whiskers.

The London Corn Trade Association proposes a clause in bills of lading making the shipper liable for one-half the cost to the ship owner arising from strikes. This is perfectly fair if, on the other hand, the ship owner will stand half the loss on crops due

to drought. The responsibility is as clear in one case as in the other.

In spite of a short crop, rye flour is dull. How about the caraway seed market.

Brother Hank says: "Lots of sales ought to be spelled 'sells'." "But not among grain dealers," says I. "Maybe all grain dealers have wings," says Brother Hank, "but some of them have done considerable molting."

Alfalfa the Invaluable.
[From the "Alton (Ill.) Evening Telegraph"]
Henry Kranz, the Belle Street cigar manufacturer, who has been experimenting with the culture of alfalfa for several years, is more than satisfied with results.

Jack Frost, advertising manager of the "Cornbelt Stockman," evidently took a long vacation this summer, or was loafing on his job.

Mr. McGovern tells us in "The Romance of Grain" that in ancient Babylon grain was carried down the river on inflated skins. While now it is sometimes the grain that is inflated but the "skins" still carry it.

The Youngstown, Ohio, *Vindicator* announces that Dr. Duvel will lead the Grain Dealers' National Association in a discussion of the standardization of grain "rates." The Ohio paper will have to vindicate its statement.

A "Hazy" Statement.
It is reported by the *Memphis Sentinel* that the Hay Produce Company has been chartered by W. W. Hay, H. J. Hay and others. It is most unfortunate that the paper does not enlighten the readers as to what kind of hay will be produced. For instance, hay of good character or hay of good grade.



ILLINOIS

A new elevator has been completed at Latham, Ill., for H. F. Mars.

The Perdue Farmers' Elevator Company has built a house at Perdueville, Ill.

The Kempton Farmers' Elevator Company has sold its business at Cabery, Ill.

A farmers' elevator company is being organized at Hubley, near Greenview, Ill.

An addition has been built on the Prayther & Groves Elevator at Sherman, Ill.

Farmers in the vicinity of Winkel, Ill., may organize a farmers' elevator company.

Jote Bellows has purchased a corn elevator from Miller Brothers, of Milledgeville, Ill.

The Neola Elevator Company has purchased Wm. Fulrath's coal business at Savanna, Ill.

N. H. Hawk has sold his elevator at Chadwick, Ill., to Richard W. Kedell, of West Virginia.

Dickinson & Lewis have sold their elevator at Creston, Ill., to Henry Hurst, of Mendota, Ill.

The Mansfield-Ford Elevator at Lake Fork, Ill., recently destroyed by fire, will be reconstructed.

The Farmers' Elevator Company, of Cisco, Ill., has completed a 20,000-bushel annex to its elevator.

The Farmers' Grain Company has been incorporated at Armington, Ill., with a capital stock of \$5,000.

A 20-horsepower engine and a wagon scale have been installed in the Farmers' Elevator at Charlotte, Ill.

Farmers in the neighborhood of Kewanee, Ill., are making an effort to form a farmers' elevator company.

The Smith-Hippen Elevator Company will erect a new office in connection with its plant at Pekin, Ill.

The Martinton Farmers' Elevator Company, of Martinton, Ill., has filed an amendment changing its object.

The Farmers' Grain and Coal Company has awarded a contract for the erection of an elevator at Manito, Ill.

The E. B. Conover Grain Company recently opened an office at Peoria, Ill., in the Herald-Transcript Building.

J. E. Frary & Son, grain and lumber dealers at Prophetstown, Ill., have installed a second set of platform scales.

Elzis Weathers, who has been bookkeeper for the Farmers' Elevator at Ridgeway, Ill., has leased the Bankert Elevator at Newman, Ill.

The Shellabarger Elevator Company, of Osprey (R. F. D. from Clinton), Ill., has placed a concrete foundation under its wagon scales.

The directors of the Kerrick Grain Company, Kerrick, Ill., have decided to improve their elevator, and a new roof will be a feature of the improvements.

The Rooks Creek Farmers' Elevator Company has remodeled its house at Pontiac, Ill., and new coal sheds have been built. A car puller has also been installed.

The stockholders of the Farmers' Grain and Coal Company recently held their annual business meeting at Cissna Park, Ill., and a dividend of 20 per cent was declared.

The Farmers' Elevator Company has practically completed its new elevator at Manhattan, Ill., and John Lichtenwalter will have charge of the plant after the first of the year.

The Richland Milling Company, of Belleville, Ill., recently awarded a contract for the erection of reinforced concrete bins with a capacity of 50,000 bushels, to cost approximately \$9,000.

Fred E. Jalip & Co. have been incorporated at Chicago with a capital stock of \$40,000, to deal in hay, grain, etc. The incorporators are Fred E. Jalip, Oscar Nauman and Arthur A. Lewisohn.

The annual meeting of the Monticello Grain Company was held at Monticello, Ill., on Sept. 22, and C. J. Bear was elected president to succeed J. A. Lalyers, and J. O. Weddle was elected secretary.

The Burrell Engineering and Construction Company, of Chicago, Ill., has begun construction work on the new storage addition for the Neola Elevator

Company at Savanna, Ill. It will consist of three tanks having a capacity of 50,000 bushels. They will be 30 feet in diameter and 70 feet high.

H. C. Suttle has sold his elevator at Kenney, Ill., to H. B. Rowe, of that place, and son, H. B. Rowe, Jr., of Streator, Ill. Mr. Rowe, Sr., has had 25 years' experience in the elevator business.

Leon Priwer, hay and grain dealer at East St. Louis, Ill., has announced that he will build a 60,000-bushel elevator as soon as a site is selected. The house will be of fireproof concrete construction.

The Cerro Gordo Grain and Coal Company has installed new equipment in its elevators at Cerro Gordo, Ill., including a Richardson Automatic Scale, a gravity loader and a Fairbanks-Morse Automatic Scale.

The Flanagan Farmers' Elevator Company, of Flanagan, Ill., held its annual meeting recently and Thomas Dillon and Emil Monk were re-elected directors and Eli Stuckey was appointed to take the place of P. M. Schertz, deceased.

The capital stock of the Plainfield Grain Company, of Plainfield, Ill., has been increased from \$25,000 to \$75,000, and the company has taken over the elevators of Kersten & Smiley, located at Plainfield, Normantown and Wolf's Crossing.

M. R. Walsh has sold his elevators at Campus and Cardiff, Ill., and will engage in farming and stock raising on his farm near Nemaha, Iowa. The elevators have been bought by Joseph H. Walsh and George E. Walsh. The first named will operate the elevator at Cardiff and the latter will operate the one at Campus. They took possession of the properties on Oct. 1.

EASTERN

It is reported that H. O. Hale will build a mill and elevator at Norwich, N. Y.

Henry W. Cutler, of Providence, recently purchased the business of the Jenks Grain Company at Attleboro, Mass.

The Canada Atlantic Grain Company, of New York City, has increased its capital stock from \$30,000 to \$50,000.

Louis H. Whitaker has taken over the grain business of his brother, Frank H. Whitaker, at East Long Meadow, Mass.

The Globe Elevator Company, of Buffalo, N. Y., has received a permit to erect a one-story frame warehouse, costing \$3,000.

Howe Bros., grain dealers of Gardner, Mass., have dissolved partnership, Marshall M. Howe having taken over the interest of Harry R. Heselton.

The Clarke Elevator Company has been incorporated at Wilmington, Del., with a capital stock of \$250,000. The incorporators are F. D. Buck, G. W. Dillman and R. E. Crawl.

The Maryland Crop Improvement Association, the Maryland State Horticultural Society and similar organizations will hold their "Maryland Week Exhibition" at Baltimore from Nov. 17 to 22.

The Acme Milling Company, of Olean, N. Y., has prepared plans for the erection of a four-story steel and brick building to be used principally for storage purposes, the structure to cost about \$15,000.

Stewart, Waters & Co., Inc., have been incorporated at New York City, with a capital stock of \$500,000, to deal in realty, grains, produce, etc. The incorporators are Charles O'Sullivan, M. E. Ireland and Thomas L. Waters.

The F. D. Beyer Company, which operates the plant of the Tyrone Milling Company at Tyrone Forge, Pa., is building an addition 30x45 feet on the ground and five stories high, which will have a storage capacity of 12,000 bushels of grain.

W. M. Hazlegrove has opened a grain brokerage office in the Wabash Building at Pittsburgh, Pa. Mr. Hazlegrove was formerly engaged in the grain business at Baltimore, but of late has been representing houses in Chicago, Kansas City and Buffalo.

The Cutler Feed Company, of North Wilbraham, Mass., is building an elevator at Westfield, Mass. The building, a frame structure, will rest on a concrete foundation and will have a frontage of 40 feet and a depth of 100 feet. It will be three stories high, except the elevator shaft, which will be five stories in height. It is expected that the building will be completed by the first of the year, and will

have a capacity of 10 carloads of grain. A spur track has been laid from the New York, New Haven & Hartford Railroad to the house.

A concrete elevator, having a capacity of 250,000 bushels, will be erected at Buffalo, N. Y., in connection with the new feed plant of the Clover Leaf Milling Company.

The Buffalo Flour Mill Company has awarded a contract for the machinery equipment for a new elevator and feed plant at Lewisburg, Pa., and also for similar equipment for its plant at Milton, Pa., to the Wolf Company, of Chambersburg, Pa., through Frank Yeagley.

SOUTHERN AND SOUTHWESTERN

E. J. Miller has completed a 20,000-bushel elevator at Perry, Okla.

Sims & Giles have completed a corn-shelling plant at Baldwin, La.

C. F. Harshberger has built an addition to his elevator at Yale, Okla.

The Knaur Grain Company will build a 50-barrel flour mill at Denison, Texas.

The S. K. McAshan Grain Company, of Houston, Texas, has filed proofs of final payment.

Chapman & Lewis, of Snyder, Okla., have sold their elevator to C. H. and Barton Poteet.

The Rosenberg Mill and Elevator Company, of Rosenberg, Texas, has filed proofs of final payment.

Behannon Bros. are building a second warehouse at Lufkin, Texas, to handle their grain and produce business.

M. H. Smith has purchased the new elevator at Alex, Okla., recently erected by the Moore Grain Company.

The Lake Charles Grain Company, of Lake Charles, La., is building an elevator and feed mill at Goosport, La.

A grain elevator and corn sheller will soon be erected at Thibodaux, La., by the Percy-Lobdell Grocery Company.

The L. B. Grant Lumber Company, of Strong City, Okla., is building a warehouse for grain, and may erect an elevator later.

Childers Bros. have taken over the business of the Dalhart Grain and Coal Company at Dalhart, Texas, from W. Y. Howze.

The Steger Milling Company, of Bonham, Texas., completed its corn elevator last month, and the house is operated by electricity.

W. E. Goode, manager of the Canadian Elevator at Hinton, Okla., has installed a new sheller and cleaner, and is building a cob house.

S. H. Lewis and Thomas Chapman have sold their elevator at Snyder, Okla., to C. H. and Barton Poteet, the latter to act as manager.

John Wade & Son, of Memphis, Tenn., are planning branch grain and feed houses throughout the Delta, the first to be established at Greenwood, Miss.

The Jacksonville Grain and Commission Company, of Jacksonville, Texas, has filed an amendment, increasing its capital stock from \$10,000 to \$20,000.

It is reported that the Southern Pacific Railroad Company will establish a corn elevator at Thibodaux, La. Hiram W. Sheridan, of New Orleans, is general superintendent.

J. A. Brice and W. D. Cowden have formed a partnership at Oneonta, Ala., for the purpose of conducting a wholesale and retail grain and feed business, and a warehouse is under course of construction.

The Durant Grain and Elevator Company, Durant, Okla., has received a charter and is capitalized at \$10,000. The directors are W. F. Pendleton, E. W. Stewart, W. P. Stewart, James R. McKinney and B. A. McKinney.

M. L. Walker & Co., grain dealers, have been incorporated at Louisville, Ky., with a capital stock of \$8,000. The incorporators are M. L. Walker, E. B. Walker and C. M. Pate.

The Josey-Miller Company, whose elevator at Beaumont, Texas, was recently destroyed by fire, will rebuild immediately. A mill, elevator and warehouse will be erected of brick and reinforced concrete. The new plant will represent an expendi-

ture of \$50,000, the daily capacity being greatly increased.

The Central Grain Commission Company, of Muskogee, Okla., has been incorporated with a capital stock of \$6,000. The incorporators are John Hargrove, H. C. Sullivan and C. J. Wallace.

The Southern Distributing Company has been incorporated at Hattiesburg, Miss., with a capital stock of \$5,000, to engage in the business of buying and selling grain, flour, feed, groceries, etc. The incorporators are J. E. Gray and T. H. Gooch, of Hattiesburg, and J. R. Gooch, of Gravel Hill, Tenn.

MINNESOTA AND WISCONSIN

A new elevator has been completed at Wabasso, Minn.

Alfred Olson has purchased the Imperial Elevator at Kragnes, Minn.

Henry Bergman has opened the Security Elevator at Norwood, Minn.

The Farmers' Elevator Company, of Blue Earth, Minn., will build a new elevator.

Gus Meine, of Minneapolis, is building elevators at Wayburne and Gilfillen, Minn.

The Farmers' Elevator Company has remodeled its elevator at Elbow Lake, Minn.

Randall Bros. will build an elevator on Theo. Randall's farm near Albert Lea, Minn.

A farmers' elevator may be erected at Winona, Minn., costing about \$15,000 or \$20,000.

The Burlington Elevator at Cochrane, Wis., has been removed to a new site at that place.

The Hoffman & Holton Elevator at Renville, Minn., has been leased by J. J. Houghan.

The Hubbard Milling Company has remodeled its elevator at Mankato, Minn., at a cost of \$15,000.

Farmers in the vicinity of Webster, Minn., are planning to organize a farmers' elevator company.

Electric power has been installed in the house of the Farmers' Elevator Company at Wanamingo, Minn.

The North Elevator at Felton, Minn., has been purchased by the Canton Grain Company, of Minneapolis, Minn.

Christenson & St. John have sold their elevator at Rushmore, Minn., to the Farmers' Grain and Supply Company.

The Worthington Grain Company has been organized at Worthington, Minn., by B. P. St. John and F. L. Hunniston.

The Amenia Elevator Company has opened an elevator at Hayfield, Minn., and Williard Z. Haight, of Oakes, N. D., is in charge.

The Thorpe Elevator Company has opened the old Cargill Elevator at Brown Valley, Minn., and Harley Eckelberger has been installed as buyer.

The Equity Produce Company has purchased the elevator of the New Richmond Roller Mills Company at Baldwin, Wis., and it will be used for a hay warehouse.

The Altura Elevator Company has been incorporated at Altura, Minn., with a capital stock of \$10,000. The incorporators are J. A. Spoltz, John Frisch, Andrew Oredon, etc.

The Cargill Elevator Company has purchased the Blum Elevator at Mondovi, Wis., from the Buffalo County Bank, and the house has been remodeled and flour and feed rooms added.

The Mahnomen Elevator Company was recently organized at Mahnomen, Minn., by J. J. Vorachek, of Thief River Falls, Minn.; J. H. Sluk, of Fordville, N. D., and A. L. Thompson, of Mahnomen.

A charter has been granted to the Porter Farmers' Grain and Supply Company at Porter, Minn. The capitalization is \$10,000, and the incorporators are J. B. Jacobson, P. Gunderson, K. S. Homeland, J. J. Sylth and others.

The Farmers' Elevator and Trading Company, recently incorporated at Rustad, Minn., has been capitalized at \$10,000, and the following directors were elected: M. O. Valan, Even Corneliussen, Sam Rustad, Jens L. Olsgaard and Martin Olson.

The Farmers' Co-operative Association has been incorporated at New York Mills, Minn., with a capital stock of \$20,000. The officers are as follows: S. J. Haarala, president; John Perala, vice-president; John H. Mursu, secretary, and Charles G. Hyry, treasurer.

An association to be known as the Liberty Grove Produce Company has been organized at Liberty Grove, near Sturgeon Bay, Wis., by farmers in that vicinity. The company is capitalized at \$1,500 and has taken over the elevator formerly owned by the Door County Elevator Company.

The capacity of the Consolidated Elevator Company's plant at Duluth, Minn., is being increased by the construction of a \$100,000 concrete elevator. The Barnett & Record Company, of Duluth, has the contract for the construction work. The structure will be 64x80 feet on the ground and 110 feet high.

It will contain 32 bins, having a capacity of 800,000 bushels.

The Beltrami Elevator and Milling Company, of Bemidji, Minn., has remodeled its elevator and stock room at a cost of \$5,000. A concrete foundation was built under the house, which has been enlarged.

The Erskine Elevator Company has been incorporated at Erskine, Minn., with a capital stock of \$10,000. The incorporators are H. T. Gilbertson, C. P. Hole, R. B. Ness, A. F. Cronquist, Joe Dussell, G. K. Espeseth, T. K. Berge, O. H. Rask, A. C. Ellingson, C. A. Ness, L. F. Benssen, Gunder Stenerson, Theo. Nelson and C. E. Dillon.

Mayor W. I. Prince, of Duluth, Minn., has introduced an ordinance requiring persons disposing of hay, grain and other farm products in carload lots to be licensed by the city. The measure is aimed at transients, requiring them to pay a fee of \$10 daily. Local growers and established commission merchants would not be subject to the fee.

MISSOURI, KANSAS AND NEBRASKA

The Uncle Sam Breakfast Food Company is building a 50,000-bushel concrete elevator at Omaha, Neb.

The Katy Grain Company has been incorporated at Kansas City, Kan., with a capital stock of \$20,000.

The Bushnell Grain Company has been incorporated at Bushnell, Neb., with a capital stock of \$10,000.

The Thomas Page Milling Company, of Topeka, Kan., contemplates building a 100,000-bushel elevator.

The farmers around Sholes, Neb., may organize an elevator company and take over the Saunders & Westrand Elevator.

G. W. Johnson, of Cabool, Mo., will build an elevator and flour mill at Deepwater, Mo., the building to be 30x40 feet on the ground.

The Hume-Robertson-Wycoff Company has built an addition to its elevator at Madison, Neb., and a 25-barrel flour mill will be installed.

John McQuillen, of Ponca, Neb., has purchased four elevators of the McCall-Webster Elevator Company, located at Belden, Laurel, Waterbury and Jackson, Neb.

The Ball & Gunning Milling Company has completed the erection of eight grain tanks in connection with its elevator at Webb City, Mo., each having a capacity of about 10,000 bushels.

The Farmers' Grain and Elevator Company will erect a wholesale flour and feed warehouse at Norfolk, Neb., to cost about \$4,000. The structure will be a two-story concrete building, about 40x80 feet in size. An office will occupy a part of the house.

The Farmers' Co-operative Mercantile Company has been incorporated at Scribner, Neb., with a capital stock of \$25,000, to buy and sell grain, live stock, lumber, etc. The officers of the company are: Arthur H. Shultz, president; Hans Paasch, vice-president; J. H. Windhusen, secretary and treasurer, and John Brass and George Hilbers, directors.

THE DAKOTAS

S. Stewart has completed his elevator at Mott, N. D.

The Bagley Elevator at Leipzig, N. D., has been closed.

It is reported that an elevator will be erected at Westby, N. D.

A farmers' elevator will be erected at Venlo, near Anselm, N. D.

The elevators at Harmon and Gwyther, N. D., have been repaired.

The Eldridge Farmers' Elevator at Eldridge, N. D., has been closed.

The Farmers' Elevator Company has remodeled its office at Munich, N. D.

The Occident Elevator Company has completed coal sheds at Edmunds, N. D.

The Northland Elevator Company is building a new elevator at Fortuna, N. D.

A new Ely-Salyards Elevator is under course of construction at Hannaford, N. D.

The house of the Farmers' Elevator Company at Calvin, N. D., has been remodeled.

L. L. Logan, of Deering, N. D., has purchased a portable elevator from L. E. Albright.

Otto L. Schulz & Co. have opened their new elevator between Washburn and Underwood, N. D.

Thomas Colter and Adam Robb, of Minot, N. D., have purchased the Osborne-McMillan Elevator.

The Landa Farmers' Elevator, Landa, N. D., recently damaged by lightning, has been repaired.

Farmers have awarded a contract for the erection of an elevator between Rugby and Barton, N. D.

The Hunting Elevator at Tyndall, S. D., has been purchased by Hefner Bros., of Menno, S. D.

A new elevator has been completed at Tappan, N. D., by the Equity Elevator Company. It has a

capacity of 40,000 bushels and is managed by Joseph Stoullil.

The Farmers' Elevator Company, of Sterling, N. D., contemplates purchasing the Powers Elevator.

The Lake Grain Company has leased the elevator and feed mill of C. H. Baker at Devils Lake, N. D.

The Independent Elevator at Fortuna, N. D., has been completed and has a capacity of 18,000 bushels.

According to a report, the Hegen Grain Company contemplates building a mill at New England, N. D.

Myers & Co., grain commission merchants, of Minot, N. D., have opened an office in Ambrose, N. D.

The Hart Elevator and Milling Company has traded its plant at Volin, S. D., for land in Swift County, Minn.

The Havelock Farmers' Equity Union has purchased the Regent Grain Company's elevator at Havelock, N. D.

The Duluth Elevator at Crary, N. D., recently damaged by an express train running into it, has been reconstructed.

The Burnstad Elevator Company is building an elevator at Burnstad, N. D. At present it is using a portable elevator.

W. M. Courtenay, formerly with the Osborne-McMillan Company, has engaged in the grain business at Courtenay, N. D.

The Farmers' Elevator Company, of Howard, S. D., is now doing business in its new house, which is operated by electricity.

The Farmers' Grain and Trading Company, of Milnor, N. D., has taken over the business of the Milnor Lumber Company.

The Sleight Elevator at Drake, N. D., has been sold to Fred Albrecht, who will dismantle the house and remove it to another point.

The Winter-Truesdale-Ames Company, of Minneapolis, will build an elevator at Sidney, N. D., having a capacity of 35,000 bushels.

A contract has been awarded for the building of an annex to the elevator at Belfield, N. D., which will be 15x25 feet on the ground.

The Norton Farmers' Elevator Company has been organized at Norton, N. D., and has engaged in business with H. E. Braum in charge.

The George C. Bagley Elevator Company is building an elevator at New England, N. D., which will make the sixth grain house in that town.

The opening of the new Farmers' Elevator at Wautauga, S. D., was celebrated with speeches and games during the day and a dance at night.

The E. Lloyd Elevator Company has been incorporated at Beach, N. D., with a capital stock of \$10,000. The incorporators are E. Lloyd, P. A. Cook and others.

The elevator at Ashley, N. D., recently sold by Hedtke & Grosz to Minneapolis parties, has been purchased by Stienecker & Kretschmar, of Venturia, N. D. David Klauss will continue to manage the house.

The Beardsley Elevator Company has been incorporated at Parkston, S. D., with a capital stock of \$10,000. The incorporators are John J. Tiede, John Tiede, Jr., H. P. Zehnpfenning and A. M. Zehnpenniss.

The Atlas Elevator Company, whose house at Yankton, S. D., was recently destroyed by fire, is using the Hawkeye Elevator for the present. It is reported that the Atlas Company will not rebuild at that place.

The Farmers' Co-operative Elevator Company has been incorporated at Emery, S. D., with a capital stock of \$10,000. The incorporators are Fred Litz, Nick Ernster, Math Michels, Jr., William Ehret and John Terveen.

Officials of the Midland Continental Railroad have located a new townsite at Clements, N. D., on the Wimbledon extension north of Jamestown, N. D. The new station is located seven miles from Spiritwood, N. D., and will start with an elevator, a store, bank and lumber yard.

The Farmers' Elevator Company at Colgan, N. D., recently organized, is building an elevator, and the contractor, A. J. Clark, and his assistants recently entertained the directors of the company with a banquet, the event being one of the first social affairs in the new town.

Ed. Lowe has purchased a site at Williston, N. D., on which he will erect an elevator. Mr. Lowe has been engaged in the grain business for some time and recently operated an elevator and feed store under a lease. A flour and feed store will be a feature of the new enterprise.

The stockholders of the New England Equity Exchange, New England, N. D., have reorganized as the Farmers' Equity Exchange, a co-operative association, and the following officers were elected: L. M. Mortenson, president; C. E. Teath, vice-president, and John Van Bergen, secretary-treasurer. The company has been incorporated and dividends

now will be pro-rated instead of being paid on the capital stock only.

The Farmers' Elevator at Montpelier, N. D., has been improved this fall by the installation of an Invincible Grain Cleaner, a manlift and a Richardson Automatic Scale.

G. B. Moulton, C. H. Moulton, L. J. Alguire and Robert Alguire have received a charter to operate as the Fort Yates Farmers' Elevator Company at Fort Yates, N. D. The company is capitalized at \$10,000, and purchased an elevator from the Thorpe Elevator Company last year.

The Farmers' Elevator Company has been incorporated at Aylmer (R. F. D. from Martin), N. D., for the purpose of dealing in grain and coal. The directors have elected the following officers: George E. Hanchett, president; Frank Chapek, vice-president; and W. N. Goodlaxon, treasurer and manager.

OHIO, INDIANA AND MICHIGAN

Ed Kelley & Son, of Waldron, Mich., are building a 10,000-bushel elevator.

M. D. Holbrook, of New York, has leased the elevator at Dryden, Mich.

A steam heating plant has been installed in the elevator at Bentley, Mich.

Goodrich Bros. have begun construction on their new elevator at Winchester, Ind.

The Orleans Elevator Company, of Orleans, Mich., has leased its house to Post Bros.

G. S. Young & Son, of Pewamo, Mich., have sold out to the Pewamo Farmers' Elevator Company.

The Laingsburg Elevator Company, of Laingsburg, Mich., recently leased the flour mill of Platt & Son.

McLane, Swift & Co., grain dealers of Battle Creek, Mich., have removed their principal office to Detroit, Mich.

The Portland Farmers' Elevator Company has been incorporated at Portland, Mich., with a capital stock of \$15,000.

J. J. Cooper is building a store at Saybrook (R. F. D. from Ashtabula), Ohio, a part of which will be used for grain storage.

The Holgate Grain and Supply Company has been incorporated at Holgate, Ohio, with a capital stock of \$15,000, by J. H. Flowers.

Ward & Whitney, grain and hay dealers at Oberlin, Ohio, have purchased an old flour mill at that place and will install a feed mill.

The Studebaker Grain and Seed Company has taken over the elevators at Van Buren and Roseburg, Ind., the consideration, \$11,000.

The Omer Mill and Elevator Company, of Omer, Ohio, has built a new office, installed new scales and made other improvements in its plant.

H. C. Brown, who has been operating an elevator at Wolcottville, Ind., for the past 18 years, has sold the property to a Mr. Smith, of Howe, Ind.

Parker K. Gale, who was formerly associated with the Stafford & Gale Grain Company at Cincinnati, Ohio, is now with the firm of Ellis & Fleming.

The J. D. McLaren Company, grain dealers at Plymouth, Mich., recently filed an amendment increasing its capital stock from \$100,000 to \$140,000.

The plant of the Reese Elevator and Milling Company at Bay City, Mich., was recently converted into a beanery, the milling equipment having been removed.

Eliphalet Hickman has purchased Mr. O'Connor's interest in the Corydon Elevator at Corydon, Ind., and the new firm will operate under the firm name of Thomas & Hickman.

The Macdonald Engineering Company, of Chicago, has been awarded the contract for the construction of an elevator on the city farm at Warrensville, Ohio, to cost \$7,850.

The Kingston Grain and Mill Company has been incorporated at Kingston, Ohio, with a capital stock of \$10,000. The incorporators are A. W. Jones, C. Marwgraf, F. M. Snyder, Cloy Snyder and Harriet E. Jones.

The Lock Two Grain and Milling Company, Saint Paris, Ohio, is building a structure on the site of its former office near the elevator. It is 24x36 feet in size, and will be utilized for an office, and a flour, feed and sack room.

F. E. Haller, of the Montpelier Mill and Grain Company, Montpelier, Ind., has purchased the Keystone Elevator at Bluffton, Ind., which has been operated for some time by D. M. Light & Bros., of Greenville, Ohio. Possession will be given on November 1.

The directors of the Co-operative Grain and Milling Company, Tiro, Ohio, held their annual meeting last month and elected the following officers: President, A. R. Morse; vice-president, Gen. W. Cahill; secretary, H. B. Morrow; assistant secretary and manager, Allen Davidson, and treasurer, W. A. Brown. The company has been seeking to get a permit from the Pennsylvania Railroad Company to raze the old elevator standing on the railroad

company's ground, and should this be done, a new elevator will replace the old house.

The Cleveland Grain Company, which recently leased the Big Four Elevator at Cincinnati, Ohio, is now remodeling the plant. The property has been made as fireproof as possible and electric equipment has been installed. A drying room will be added, together with bleaching apparatus for oats.

John B. Van Wagener, of London, Ohio, has awarded a contract to the Reliance Construction Company, Indianapolis, Ind., for the building of an addition to his elevator. The new structure will be 28x40 feet on the ground and 68 feet high. It will be provided with new equipment with a capacity for handling 1,000 bushels of grain hourly. The improvement is to be complete by November 1.

Andrew Ringlein has begun the construction work on his new 20,000-bushel elevator at Lima, Ohio. The house is being constructed on a concrete foundation and when complete, equipment will be installed for turning out from 20 to 30 tons of poultry feed daily. Recently a burglar entered the Ringlein's office by prying open a window and the strong box was rifled but no serious loss was incurred, valuables not being in the office safe at that time.

IOWA

A. A. Lost will erect an elevator at Bedford, Iowa.

Oscar Critz has purchased an elevator at Titonka, Iowa.

The Farmers' Elevator Company, of Truesdale, Iowa, has built new coal pockets.

Farmers in the vicinity of Wayland, Iowa, are considering the erection of an elevator.

The Farmers' Elevator Company, of Woolstock, Iowa, held its annual picnic on Sept. 16.

A new elevator may be constructed at Norwich, Iowa, by the farmers in that community.

The directors of the Farmers' Elevator Company, Alden, Iowa, may install automatic scales.

N. S. Beale, of Tama, Iowa, and others contemplate building an elevator at Gilman, Iowa.

A farmers' elevator company may be organized at Oto, Iowa, by farmers in that community.

The annual picnic of the Farmers' Elevator Company, Eagle Grove, Iowa, was held on Sept. 20.

The Western Elevator Company has sold its elevator at Lake Mills, Iowa, to H. P. Rasmussen.

The Pocahontas Grain Company has taken over the L. W. Wheeler Elevator at Pocahontas, Iowa.

On Sept. 18 the Farmers' Elevator Company, of Green Mountain, Iowa, enjoyed its annual picnic.

A new brick office has been constructed by the Farmers' Elevator Company at Livermore, Iowa.

The house of the Farmers' Elevator Company at Lytton, Iowa, has been remodeled and its capacity doubled.

The Farmers' Elevator Company, of Dallas Center, Iowa, considers building an elevator at Minburn, Iowa.

The Farmers' Grain and Lumber Company, of Dows, Iowa, has purchased a freight elevator for handling coal.

The elevator of the Farmers' Co-operative Creamery Company at Tama, Iowa, has been enlarged and rebuilt throughout.

J. H. Strohhahn has sold the elevators at Dixon and New Liberty, Iowa, to the Farmers' Elevator Company, of Dixon.

The Farmers' Elevator Company, of Madrid, Iowa, has torn down one of its corn cribs and will elevate two others, in connection with other improvements.

Improvements have been completed in the elevator of the Farmers' Co-operative Company at Lake Mills, Iowa, including the rebuilding of two scales and the driveway.

Yost & Morley, of Libertyville, Iowa, have prepared plans for the building of an elevator at Stockport, Iowa. The building will be 36x48 feet on the ground and 81 feet high.

An addition has been constructed to the Tjaden Elevator at Wellsburg, Iowa, 24x32 feet in size and 34 feet high. The entire plant will now have a capacity of 35,000 bushels.

At a recent meeting of the stockholders of the Farmers' Elevator Company at Gilman, Iowa, it was decided to enlarge their present plant and not to rebuild on the site of the elevator recently burned.

The Farmers' Grain Company has been incorporated at Reeves, Iowa, with a capital stock of \$20,000. The directors are P. G. Timmerman, G. A. Marken, M. L. Schroyer, Frank Hinton and A. J. Glanville.

The Excelsior Mill and Elevator Company at Ainsworth, Iowa, has been taken over by F. W. Shrimpton, Jerry Shrimpton and Benjamin Shrimpton, of Salem, Neb., the new firm to be known as Shrimpton Bros. J. B. Finney, the former owner,

will retain the implement business which was a part of the establishment founded by him.

The A. D. Hays Elevator Company, of New London, Iowa, has taken over the mill and elevator of I. J. Todd at Mediapolis, Iowa.

The annual picnic of the Newburg Farmers' Elevator Company, Newburg, Iowa, was held last month, in connection with the outing of the Newburg creamery company. Speeches and athletic sports were enjoyed by all.

Theodore Sindt, for the past 12 years manager of the Davenport Malt and Grain Company at Davenport, Iowa, retired on Oct. 1, to organize a grain company at Lake Park, Iowa, the new firm to be called the Theodore Sindt Grain Company.

The Farmers' Grain Company has been incorporated at Urbana, Iowa, with a capital stock of \$25,000. Officers have been elected as follows: President, N. E. Miller; vice-president, James Brown; secretary, C. E. Heath, and treasurer, Theo. H. Remer.

A farmers' co-operative company is being organized at Osage, Iowa, to handle grain, coal, lumber, etc. A provisional organization was formed with William Cordes as president; Henry Indra, vice-president, and Wm. Smith, clerk. The Mast Elevator may be taken over.

The Brandon Co-operative Exchange has been incorporated at Brandon, Iowa, to engage in selling grain, lumber, live stock, etc. The capital stock is \$15,000, and the officers are: J. D. Nobholz, president; R. H. Jamieson, vice-president; C. R. Bolton, secretary, and Theo. Peck, treasurer.

CANADIAN

J. E. Carter and son are building an elevator at Alcott, Sask.

A new elevator is under course of construction at Woodrow, Sask.

H. Mustard & Sons, millers at Wyoming, Ont., have built an elevator.

The Security Elevator Company has completed its elevator at Mirror, Alta.

The Treherne Elevator Company, Ltd., has been incorporated at Treherne, Man.

The Maple Leaf Milling Company has completed its new elevator at Perdue, Sask.

The Govan Grain Growers' Co-operative Company has been incorporated at Govan, Sask.

The Holland Elevator Company, of Holland, Man., opened its new house on September 20.

The elevator of the Alberta Pacific Grain Company, located at Camrose, Alta., has been opened for business.

The Imperial Elevator and Lumber Company has leased the Farmers' Elevator at Wapella, Sask., for the season.

A contract has been awarded for the concrete work of the Government elevator extension at Port Colborne, Ont.

Farmers in the neighborhood of Stavely, Alta., have purchased the Severson Elevator, which has a capacity of 90,000 bushels.

The Matheson-Lindsay Grain Company, of Winnipeg, Man., has opened a branch in Regina, Sask., with Miller & Ross in charge.

J. Cummings has been appointed at Watrous, Sask., to represent Donald Morrison & Co., grain commissioners of Winnipeg, Man.

Bernet & Griffiths have purchased the elevator and grain business of the Farmers' Grain and Supply Company at Wauchope, Sask.

It is stated that the new Grand Trunk Elevator at Montreal, Que., will be in operation by Nov. 15. It will have a capacity of 1,000,000 bushels.

The Dominion Elevator has discontinued business at Whitewater, Sask., and the building will be dismantled and removed to Swift Current, Sask.

The new terminal elevator of the Canadian Government located at Port Arthur, Ont., has been completed and has a capacity of 5,000,000 bushels.

H. Matthews has sold the Hope Elevator at Carberry, Man., to the Grain Growers' Grain Company, Ltd., who will tear it down and rebuild it at Cromer, Man.

The Lake of the Woods Milling Company, Ltd., of Winnipeg, Man., has purchased the 30,000-bushel elevator of the Moose Jaw Elevator Company, Ltd., Moose Jaw, Sask.

J. J. Burke, manager of the Alberta Pacific Elevator Company, has announced that the company will build a large terminal elevator at Macleod, Alta. Grain will be stored in this house for shipment to Japan and China. According to Mr. Burke the grain trade with the Orient is increasing.

It is reported that the Grain Growers' Grain Company, Ltd., of Winnipeg, Man., will act as selling agents for the Alberta Co-operative Elevator Company, Ltd., this year. The latter company is a farmers' organization backed by the bond guarantee of the provincial government, has a very large num-

ber of line elevators under construction, and is said to have its hands sufficiently full without going into the selling end of the business this year.

The Vancouver Milling and Grain Company, of Vancouver, B. C., has established a branch warehouse in New Westminster, B. C., to handle its increasing business in the Fraser Valley.

A farmers' co-operative elevator company is being organized at Alliance, a new town through which will pass the Canadian Pacific Railroad and the Canadian Northern Railroad, about 20 miles south of Sedgewick, Alta.

The Kerr-Robert Elevator Company, of Kerr-Robert, Sask., has been succeeded by the Western Farmers' Elevator Company, and a contract has been let for a 30,000-bushel elevator. W. C. Hammond is secretary of the company.

Geo. McCulloch & Sons, Ltd., a grain and farm company, have been incorporated at Souris, Man., with a capital stock of \$300,000. The provisional directors are George McCulloch, H. W. McCulloch, R. J. McCulloch, W. C. McCulloch and S. H. Forrest.

It is reported that the Canadian Pacific Railway Company will sell elevators "A" and "C" at Fort William, Ont., to James Richardson & Sons, Ltd., of Winnipeg, Calgary, Kingston and Montreal, grain merchants and shippers. The elevators have a capacity of 1,100,000 bushels.

The Barnett-McQueen Company, Ltd., of Fort William, Ont., has been awarded the contracts for the internal storage elevators to be erected at Saskatoon and Moose Jaw, Sask. The construction company is completing the erection of the government terminal elevator at Port Arthur, Ont., and the work has met with the approval of the Grain Commission. The contract calls for the completion of the elevators by Dec. 15, 1914. They will have a capacity of three and one-half million bushels and, if necessary, the capacity can be increased to 20,000,000 bushels.

E. J. Fream, secretary of the Alberta Co-operative Farmers' Elevator Company, Ltd., recently stated: "Seven of the 51 farmers' elevators, which it is our intention to build in Alberta, are now in operation in different towns throughout the province, and they are all of them doing a very satisfactory business." Work on the other elevators, according to Mr. Fream, is progressing very favorably and a number of them will be completed within a short time. The elevators now in operation are situated at Macleod, Staveland, Champion, Langdon, Munson, Stettler and Loughheed.

The Dominion Government has awarded a contract for the erection of grain conveyors at two additional steamship berths at West St. John, N. B. The work will cost about \$140,000 and will be rushed to completion for use in the coming winter, when the new million-bushel elevator of the Canadian Pacific Railroad will also be in commission. It is stated that the port will be in much better condition in the coming winter to handle grain shipments than ever before. By the winter of 1914-1915 two more wharves with warehouses and other equipment will be completed, still further enlarging the capacity of the port.

The elevator plant that the Dominion Government will erect in Moose Jaw, Sask., will consist of reinforced concrete tanks, 84 in number with 66 interspace tanks. They will cover a ground area 144x288 feet in size. Each of the circular tanks will be 24 feet in diameter. The workhouse will be 76½x158½ feet in size and 169 feet high with its foundation 16 feet under ground. There will be 50 circular bins, 35 interspace bins and 26 outerspace bins, with a storage capacity of 500,000 bushels of grain. The track shed on the receiving side of the workhouse will be 50x176 feet, and on the shipping side 32x144 feet in size. On each side of the workhouse there will be railway tracks, three on the receiving side and two on the shipping side. The drying house will be equipped with an Ellis Drier, made by the Ellis Drier Company, of Chicago. It will have a capacity of 1,000 bushels hourly. The entire plant will have a storage capacity of 3,000,000 bushels and it is to be ready for operation by December 1, 1914.

WESTERN

The new elevator at Malta, Mont., has been placed in operation.

John Brown is building an elevator and feed mill at Grover, Colo.

It is reported that two elevators will soon be erected at Denton, Mont.

The Imperial Elevator Company will erect an elevator at Harlem, Mont.

George W. Woolf is building a grain and hay warehouse at Casper, Wyo.

The new Farmers' Elevator at Hingham, Mont., began operations on Sept. 30.

The Merrill Grain and Farmers' Elevator Company has been incorporated at Ashton, Idaho.

The Farmers' Elevator Company, of Cartersville, Mont., recently opened for business with P. N. Snyder

in charge. The house has a capacity of 30,000 bushels.

A farmers' elevator and feed barn have been completed at Dore, near Fairview, Mont.

The Lilly Company is building an elevator in conjunction with its new mill at Seattle, Wash.

The Farmers' Elevator Company at Redstone, Mont., has decided to erect a 25,000-bushel elevator.

Chas. E. Lewis & Co., grain firm of Minneapolis, Minn., have opened a branch office in Lewistown, Mont.

Work is progressing on the Montana Elevator at Grass Range, Mont., which will have a capacity of 20,000 bushels.

The Farmers' Elevator Company, recently organized at Lakeside, Mont., has taken over the elevator of R. O. Lunke.

Farmers in the vicinity of Palouse, Wash., are interested in the organization of an elevator company to handle grain in bulk.

The new elevator of the Farmers' Co-operative Association at Havre, Mont., has been completed and is now receiving grain.

Business men of Bridger, Mont., have organized the Bridger Grain Company, which has leased a warehouse for grain handling.

The C. E. Wood Company, of Culdesac, Idaho, has remodeled its elevator and installed a new smutter and cleaner. An addition has been constructed in which a chop mill will be installed, to be operated by steam.

It has been announced that the Broadwater County Elevator Company, of Townsend, Mont., will build an elevator at Toston, Mont., by the first of the year.

A new elevator is under course of construction four miles from Buffalo, Mont., on a tract of land owned by Stewart Baxter, H. M. Schmidt, H. C. Jordan and others.

The California and Oregon Grain and Elevator Company has received a permit to build a tower, 17 feet high, in connection with its plant at Portland, Ore., the structure to cost \$1,200.

The Brownsville Warehouse and the Brownsville Flouring Mill are now under one management at Brownsville, Ore. The warehouse will be utilized for oats and hay, flour and feed, seed cleaning, etc.

C. R. Schain, of Minneapolis, Minn., and associates will build a 50,000-bushel elevator at Dillon, Mont. The Beaverhead Elevator Company, recently incorporated, has been taken over by the new company.

W. H. Kenworthy & Son, grain, flour and feed merchants, of Tacoma, Wash., have incorporated with a capital stock of \$100,000. The incorporators are W. H. Kenworthy, J. Fred Kenworthy and others.

The Farmers' Elevator Company has been incorporated at Bainville, Mont., with a capital stock of \$10,000. The incorporators are Percy Martin, William F. Rhea, Charles J. Memherd, Jess Peterson and Charles Johnson.

The Roberts Elevator Company, of Roberts, Mont., has been incorporated with a capital stock of \$20,000. The directors are D. C. O'Shea, Albert Budes, F. E. Clark, of Red Lodge, Mont.; J. C. Abrahamson and C. B. Hudson, of Roberts.

The Occident Elevator Company, a subsidiary firm of the Russell-Miller Milling Company, Minneapolis, Minn., has purchased the Farmers' Elevator near Glendive, Mont., from C. R. Schain. A. Argall, of Beach, N. D., has been appointed manager of the house.

Farmers in the neighborhood of Modesto, Cal., have started a movement to erect a warehouse at Standiford Station, to handle their crop of grain and alfalfa. The house is to have a capacity of 2,000 or 3,000 tons. James High, S. H. Lydiard, Lou Krohn, W. M. May, A. B. Smith and others are interested.

The Bend Milling and Warehouse Company, of Bend, Ore., is building an addition to its plant in the form of a 6,000-bushel elevator. The building will be four stories high, the first story to be utilized for a 30-ton barley equipment and the remaining floors will be used for grain bins. The cost of the addition will be about \$3,000.

The United States Quartermaster at Washington, D. C., recently awarded the following bids for shipment to the Philippines: W. W. Robinson Company, Seattle, Wash., 3,000 tons of oats; the Albers Bros. Milling Company, 1,000 tons; Edward F. Cameron, Helena, Mont., 1,500 tons, and the Northwest Grain and Warehouse Company, of Portland, Ore., 1,500 tons.

D. L. McDaniel, of Portland, Ore., associated with the firm of W. A. Gordon & Co., has removed to San Francisco, Cal., to succeed J. Stuart Murdoch as San Francisco representative of that company. Mr. Murdoch has associated himself with F. J. Sullivan under the firm name of F. J. Sullivan & Co., with offices in the Babcock Building. The new firm

will conduct a general grain and feed business. Both gentlemen have had many years' experience in the grain business in San Francisco.

A new 25,000-bushel elevator has been completed at Buffalo, Mont., and received its first grain on Sept. 16. The building contains 11 bins and is equipped with a 100-bushel hopper scale and a Fairbanks-Morse Wagon Scale among other modern equipment.

The Farmers' Union is completing its warehouse and elevator at Culdesac, Idaho, which will have a capacity of 40,000 bushels of grain, and will be equipped with a smutter of 300 sacks per hour, a cleaner of 1,000 bushels hourly, a chop mill and other modern machinery, all to be operated by a 40-horsepower gas engine. The building will contain 16 bins, 42 feet high, of crib construction.

The Astoria Mill and Grain Company is building a mill and elevator at Astoria, Ore., at an expenditure of about \$125,000. The site was furnished by the citizens of Astoria, who hope to see the plant in operation by spring. The elevator will have a capacity of 100,000 bushels and the mill will have an output of 500 barrels. Edgar W. Smith, of Portland, Ore., is president of the new enterprise and Charles B. Stout, formerly of Baker, Ore., is secretary and manager.

The Centennial Mill Company, of Spokane, Wash., is planning to enlarge the wheat storage capacity of its plant by the erection of reinforced concrete grain bins, with a total capacity of about 320,000 bushels of grain. The cost of the proposed improvement will be approximately \$42,000. The plans call for four bins, each with a capacity of about 80,000 bushels. Each bin will be 80 feet high and 40 feet in diameter. It is anticipated that the storage plant will be complete this fall.

GRAIN LEAKAGE AND ITS PREVENTION

BY H. A. FOSS.

Weighmaster, Chicago Board of Trade.

Leakage of grain from cars can be prevented to a large extent by careful coöperation. With a view of reducing this source of loss to a minimum, I offer the following suggestions for inspecting and preparing cars for bulk grain loading:

(a) Do not prepare any car for grain until you have thoroughly inspected it, inside and outside, to determine the fitness of the car box, and what must be done to make it grain tight. The writer does not consider cars with door posts loose or broken out at the floor, or cars with floors loose from the sills, safe for carrying grain. And, too, cars with outside sheathings and side sills in such a state of disrepair that the sheathings are liable to tear loose from the sills when the cars are being switched about are not fit for grain. On the other hand, minor defects in cars can be quickly and effectively repaired by the free use of paper or burlap.

(b) Examine the beveled pieces which run along the sides and ends of cars underneath the lining boards, and if any are loose or missing, paper or burlap pads should be applied and secured in place with strips of wood.

(c) The floor boards of many cars are too short; in consequence, there are cracks or openings in such cars where the floors and body braces meet. These openings should be covered with burlap or paper pads held in place with pieces of wood.

(d) Also use paper freely along the floors at the ends of cars. This is a point of frequent leakage.

(e) Patch any broken car linings with paper and boards.

(f) Paper applied over cracks in the floor, and over other points of possible leakage, will go a long way towards keeping your grain from leaking out of cars.

(g) A paper or burlap pad placed over the face of the door post will insure a tight joint between grain doors and door post. These pads should overlap the floor.

(h) To prevent a weaker door or board from bulging more than a stronger door or board, apply an upright brace near the center of the doors, extending the brace from the floor; or double the doors near the bottom, especially when coöpering cars for heavy loads.

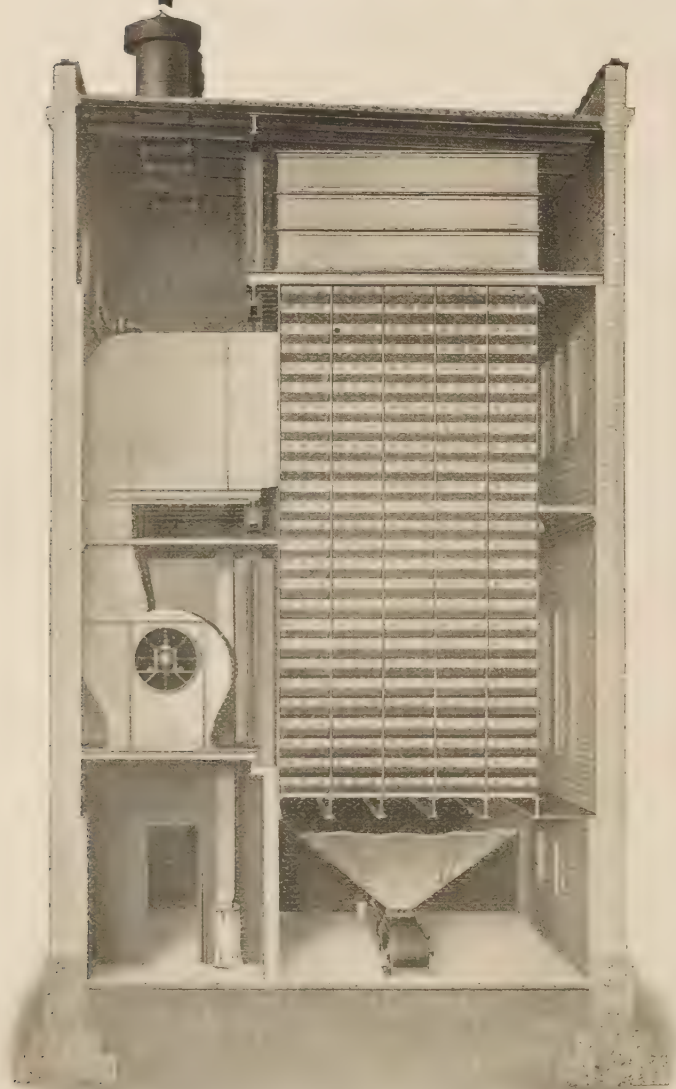
(i) It is of the utmost importance to draw the sheathings tight against the car sills, therefore use eight or ten-penny nails freely on any doubtful sheathing board. Cement coated nails are most effective for this purpose.

NOTE.—I have found it a good plan to tap the sheathings all around the car after the car has been loaded. Where such tapping shows leakage symptoms all along the sides, as it sometimes will when cars are old, a paper or burlap pad placed underneath along the sill, and secured in place with a strip of wood, will prevent possible loss of wheat at such points.

In closing I would call attention to the fact that the percentage of leaking cars reported each year is almost doubled during wheat handling months.

HE

Grain Driers



Sectional View through No. 8 Hess Drier

Bartlett, Frazier & Co., Indiana Harbor, Ind.)
(New York Central Lines)

Hess Grain

and 1914 represent the latest and best of grain driers. The improvements are the same as always. The improvement in precision in manipulation—adaptation to the widest range of finished workmanship in the makeup of the drier.

Too great stress cannot be laid upon ECONOMY in your grain, and continues long after the price of grain has fallen.

The **Hess Drier** is the *only* drier that can and does use half the power of its nearest competitor. It is able to withstand the heaviest boiler pressure without undue strain, yet it is made of steel (no cast iron bases nor manifolds).

The *shelves are perforated* with quarter-inch slots, as well as over and under them. The slots are so arranged that the warm air is applied upon both sides of the grain.

The warm air is applied upon *both sides* of the grain.

More **Hess Driers** are sold and used than of any other make. Our sales for 1913 thus far surpass those of 1912.

We make ten regular sizes, suitable for any amount of grain, and save money for you, now and hereafter.

Hess Improved (Brown)

are more extensively sold and used than any other make. They are used with gasoline, gas, alcohol or electricity. They are used for oil strainer tank, etc. Heavier—stronger—more durable.

THIRTEEN TH

describing our tester, with *full directions* for testing grain, has been placed in our card file, and we'd take it as a favor if you would send for it.

HESS WARMING & VE

910 TACOMA B

SS

Driers for 1913

design and construction. The "**Hess**" principles of dry-
k for greater economy in operation—convenience and
ange of work—elimination of repairs, and smooth and

Y IN OPERATION. The daily expense is a daily tax
gotten.

s operate with *low pressure fans*, and it requires less than
ely *self cleaning*. Its improved *steam coils* will carry the
ll circulate perfectly with exhaust or low pressure steam

permitting general circulation of air through the shelves,
ected that grain cannot leak through them.

ain columns, which also equalizes the drying effect.

ther makes combined, and, in spite of vigorous competi-
previous year by **nearly 40%**.

d of grain or seed. Tell us your wants. We can meet

-Duvel) Moisture Testers

They are adapted to the *grain dealers'* needs; for use
copper flasks, tall steel stands with service shelves below,
rable—and far more convenient than the "other kind."

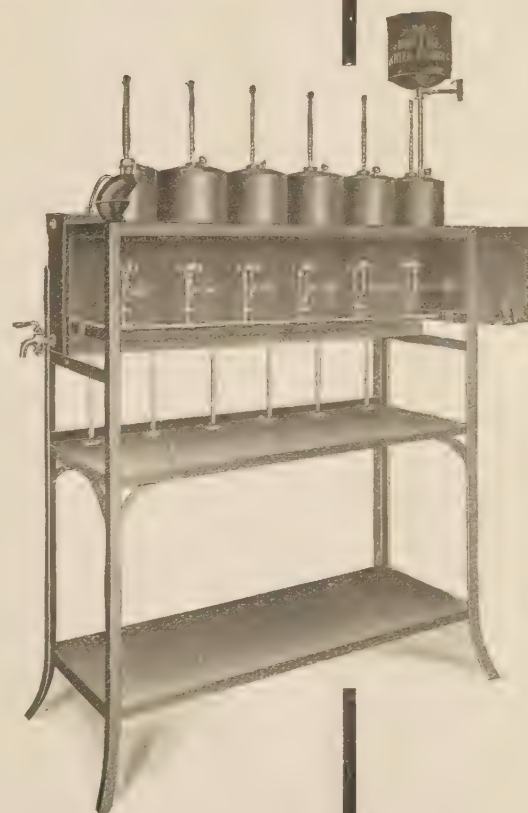
SAND BOOKLETS

been mailed by us. If you didn't get one, that means that your name
us a card and ask for one.

TILATING COMPANY

ING, CHICAGO

Moisture Testers



The Hess Improved
Brown-Duvel
Moisture Tester

Tri-State Association Holds Fall Conference

Large Attendance at Lima, Ohio, Meeting—A Line on the New Corn Crop—Conducting Hay Business Discussed—Election of Officers—Successful Banquet in Evening

An invitation to "Come early and be prepared to stay late" brought forth a great number to the trade conference and banquet of the Tri-State Grain Producers' and Dealers' Association at Lima, Ohio, on Friday, Oct. 10, 1913. In ones, twos or groups the dealers strolled into the Lima Club, the scene of the meeting, which had been specially prepared for the large attendance.

While general grain trade topics were prevalent



SECRETARY T. P. RIDDLE
Lima, Ohio.

the number soared into the forties and fifties, President Rice finally calling the meeting to order according to schedule. He said: "The greatest feature of this meeting is to get acquainted. Sociability plays an important part in business, and the only way to get acquainted is through 'mixing' and speaking before us, giving your name and firm's name and locality.

"I would suggest opening the meeting with singing to arouse enthusiasm, good feeling and sociability, but these merits being present and a leader lacking, let us continue on the program which is quite properly marked one 'of interesting and instructive trade topics.'"

A LINE ON THE CORN CROP

Secretary T. P. Riddle was the first speaker and suggested that to get the remarks and reports uniform, those present reply to the following questions:

1. How does the yield compare with 10 years' average?
2. How does the acreage compare with 10 years' average?
3. How does the quality compare with 10 years' average?

Mr. Gem, of Verne, Ind., reported that he had investigated the fields quite thoroughly in the Fort Wayne district, besides attending meetings held



AN EXTERIOR VIEW OF THE LIMA CLUB, WHERE THE MEETING WAS HELD

among local men of the district, and is convinced that the yield is equal to if not slightly above par. He has found that the acreage compares well with average, and quality is fine. W. A. Dull, from Willshire, Ohio, reported crop not as good as last, fair comparison with average, soft corn in quantities because of early frost, acreage about same, yield a little low and quality only about 80 to 90 per cent of average. D. W. McMillen of Van Wert, Ohio, reported upon observation almost an average, acreage trifle smaller owing to prevalence of clover. Quality of corn good and season very good. Expects crop to begin to move from 1st to 15th of November and shelling by end. Numerous other reports of north-

eastern Ohio, southeastern Michigan and northwestern Indiana followed, giving much the same average or a small percentage lower.

New corn was in general tabooed and several suggested that this be left in the hands of the scoop shoveler. New corn was quoted generally at 70 cents per bushel.

CONDUCTING THE HAY BUSINESS

Upon the conclusion of corn crop reports the hay business was attacked upon the Free Will Offering basis. Secretary Riddle spoke upon his price card, quoting the prevailing prices obtained by averaging the selection of ten representative market prices and working on the "Proper Working Margin" theory. This, he said, was necessary for safe and sane business since there was a great deal of conflict in the hay markets, some being normal, others extremely abnormal.

D. W. McMillen, the president of the National Hay



PRESIDENT E. G. ODENWELLER
Ottoville, Ohio.

Association, made an extemporaneous address, declaring the standards of production of hay are being gradually lowered by the producer. The farmer is trying to do more and doesn't give as much time to his hay. This causes rather a change to conservative grading at the terminal markets. He urged all Tri-State members to become members of the National Hay Association at advantageous rates and felt sure that not only hay men but all grain men would be profited by this affiliation. Mr. McMillen concluded practically the morning's meeting with a few remarks on competition and competitors.

The Lima Club served an excellent luncheon and members of the association enjoyed the whole privileges of the building.

AFTERNOON SESSION

At 1:30 the morning's topics were taken up again and dispatched in short order. On the subject, "What Constitutes a Proper Working Margin?" the consensus of opinion was in favor of the "price card" of Mr. Riddle of Lima, Ohio. It was a self-evident fact, said a number of speakers, that the country elevator operators did not use a moisture tester extensively, and very few owned one at the present time.

FEDERAL GRAIN INSPECTION

P. M. Gale of Cincinnati, when called upon, expressed great opposition to making grain inspection a political issue. "To have standard Federal grades would be excellent," he said, but the present inspec-

tion is a failure as far as the buyer goes, and not very good as far as the seller is concerned. If this could be put right in the civil service, then it would show more good points. The chief inspectors no doubt know the grades, for example, E. H. Culver, the chief grain inspector at Toledo, knows the grades from A to Z and their real value from seed to milling. Under the control of good Federal officials the value would be excellent, but I'm afraid this is too near the ideal and that politics would have great effect upon it."

He stated further that Indiana was opposed to the new Government grades and would favor maintenance of 19 per cent instead of 17½ per cent moisture for No. 3 grade.

J. W. McCord, secretary of the Ohio Grain Dealers' Association and member of the Tri-State Asso-



FORMER PRESIDENT S. L. RICE
Metamora, Ohio.

ciation, in a letter regretting his inability to be present, recommended strongly a compromise basis between the 17½ per cent and 19 per cent limits and the elimination of some of the proposed six grades.

Quite a detailed and prolonged discussion followed, ranging on Federal, State, local and National Grain Association rules for grading and inspections. First the general opinion was strongly against the new Government standards and for the maintenance of the 19 per cent moisture for No. 3 grade standard and for only the grades Nos. 2, 3, 4 and sample.

After a long discussion, however, the sentiment changed and the following resolution presented by T. P. Riddle to be sent to New Orleans was passed:

"It is the consensus of opinion of the grain producers of the Tri-State territory that the Government's proposition with respect to the standardization of corn grades is proper and commendable and that we hereby endorse them."

OHIO SEED LAW

A. P. Sandles, who was scheduled for an address upon the Ohio Seed Law was absent, but wrote regrets and stated that as there was no money given by the Legislature to punish violation of the Ohio Seed Law that it was inoperative at present and would not be enforced.

Secretary Riddle read the complete program for



D. W. McMILLEN
President National Hay Association.

the Buckeye boys' "Corn Special" trip to Washington. Special trains will leave Toledo, Columbus, Cleveland, Van Wert, Union City and Cincinnati on December 1, arriving in Washington the following morning, and tour brimful of interest has been planned.

ELECTION OF OFFICERS

The Nominations Committee, which had been previously appointed, consisting of H. W. Fish, W. A. Dull and S. C. Allinger, submitted the following names for officers for the ensuing year:

PRESIDENT—E. G. Odenweller, Ottoville, Ohio.

VICE-PRESIDENT—F. J. Reinhart, Uniopolis, Ohio.

SECRETARY—T. P. Riddle, Lima, Ohio.

TREASURER—D. R. Risser, Vaughnsville, Ohio.

The report was unanimously carried and the officers declared elected. President Odenweller, before taking the chair offered the following resolution, which was carried with enthusiasm:

"We, the Tri-State Grain Producers' and Dealers' Association, extend to the Lima Club a vote of thanks for the use of this fine hall at this meeting and our former meeting."

Some of the organizers of the association, spoke on issues now being settled which were started in the nineties. One of the organizers, Mr. Green, spoke on the great value of co-operative competition. The afternoon's meeting concluded with remarks of and congratulations to President Odenweller.

THE BANQUET

The banquet held in the evening had many features. Ninety-three of the most representative men of northeastern Ohio, northwestern Indiana and southeastern Michigan were there. After a very excellent repast the toasts were responded to, half in seriousness and half in raillery.

Among those answering to the toasts were H. C. Pollock, "Our Association"; D. W. McMillen, "The Drought and Its Effects"; Mr. Dolbey, "The Equity and Necessity of Uniformity"; D. R. Risser, "Price Boards"; H. W. Fish, "Boosting vs. Knocking"; P. M. Gale ending a good, long list with "Good Night."

The program itself was well gotten up and everyone had an interesting and enjoyable evening.

THE ATTENDANCE

The following are some of those present:

Fred E. Pond, secretary, Corn Exchange, Buffalo; Alfred Anderson, Buffalo; William Green, Lima, Ohio; Charles Knex, J. F. Zahm & Co., Toledo; A. M. Mauler, Sovine, Mauler & Co., Pleasant Mills, Md.; R. V. Harper, J. W. Smith & Co., Pittsburgh; P. M. Gale, Gale Brothers Company, Cincinnati; E. M. Crowe, Piqua; C. A. Bartow, Buffalo; F. L. Davis, Hub Brothers & Martin, Pittsburgh; Maurice Gillilan, Pierce Grain and Hay Company, Van Wert; C. C. Harlan, Harlan Brothers, Paulding; W. S. Insinger, Quincy Grain Company, Quincy, Ohio; J. E. Wells, of Wells Company, Quincy, Ohio; John E. Collins, Collins & Co., Cincinnati; C. V. Tareson, Napoleon Grain and Stock Company, Napoleon, Ohio; E. W. Luginbill, Berne Grain and Hay Company, Berne, Ind.; John F. Ash, G. Ash & Son, Forrest, Ohio; H. M. Strauss, H. M. Strauss & Co., Cleveland; F. J. Reinhart, Uniopolis; Charles R. Keilholtz, Southworth & Co., Toledo; W. A. Easterly, Gibsonburg Elevator Company, Gibsonburg; J. D. McKillen, Dudley M. Irwin Company, Buffalo; J. J. Raumacher, Eastern Grain Company, Buffalo; S. L. Rice, Metamora Elevator Company, Metamora, Ohio; Robert Kolter, Spencerville, Ohio; J. C. Custenborder, E. F. Custenborder & Co., Sidney, Ohio; B. W. Dulaney, J. Charles McCullough Seed Company, Cincinnati; C. E. Wilkinson, J. E. Wells & Co., Sidney, Ohio; F. W. Loan, Haskins; F. W. Blazy, Cleveland; E. M. Folsom, Cleveland; A. M. Courtwright, Square Deal Company, Cleveland, Ohio.

LICENSE FOR GRAIN DEALERS IN NEW YORK

The New York Legislature this year passed a law (chapter 457 of the laws of 1913) requiring all dealers selling farm products on commission to obtain a license and file a suitable bond, as provided in Section 12-A of the act. Commissioner of Agriculture Calvin J. Huson recently rendered an opinion that grain is a farm product within the meaning of the law, and that all members of the New York Produce Exchange, or others making a sale of actual produce, would be amenable to the law. In a letter to Baldwin, Wadhams, Bacon & Fisher, counsel for the New York Produce Exchange, he says:

Referring to your letter of May 29, 1913, addressed to the Attorney General relative to the New York Produce Exchange, I beg to state that there can be no controversy that grain is farm produce within the meaning of article 12-A of the Agricultural law.

This act applies to all sales of farm produce on commission made within the State of New York. In

my opinion it is not necessary, in order that this act may apply, that the party selling should have actual physical possession of the commodity so sold or physically handle the same. I therefore conclude that if there is an actual sale on commission within the state of New York, a license should be obtained under chapter 457 of the laws of 1913; if there is not an actual sale of farm produce on commission within this state, it is not necessary to obtain the license required within this state.

When the notice from the counsel relative to this opinion was posted in the exchange, there was considerable consternation among cash grain dealers, none of whom had applied for a license. A closer reading of the notice, however, brought out the opinion that this law could not affect interstate commerce transactions, and that it could only be applied to lots of grain grown and sold within the state of New York. Flour transactions are also excluded, as that commodity comes under the head of manufactured products rather than of farm produce.

NEW HOUSE IN FINE LOCATION

The Ohio crops are averaging high this year, and among those who will reap the benefit will be the new firm of receivers and shippers recently established at Fostoria, Ohio. The Fostoria Grain Company's transfer elevator, which was built by the Burrell Engineering & Construction Company, of Chicago, is one of the newest and most up-to-date

Nickel Plate Railroad, which makes it possible to handle cars rapidly.

There are four stands of elevators, the receiving leg having 6,000 bushels per hour capacity, and each of the other three 4,000 bushels capacity. There are two 96,000-pound Fairbanks Hopper Scales located on the second floor of the cupola, equipped with type registering beams. Each scale has hopper capacity of 2,000 bushels. The grain is distributed on the trolley floor by four telescope spouts.

The power used is electricity, and each elevator leg and machine is driven by an individual motor, with a total capacity of 210 horsepower.

The machinery equipment includes a Eureka Double Warehouse Receiving Separator of 3,500 bushels per hour capacity, and Eureka Clipper of 1,200 bushels per hour capacity, located on the ground floor. Both machines are equipped with ball bearings and are of the very latest type. A car puller of 12 cars capacity is located in the basement. The double power shovels are located under the roof of the car shed. There is also a portable 6-bushel Richardson Automatic Bagging Scale. There are two B. F. Constant Manlifts connecting the main and scale floors.

The office is located about 200 feet from the elevator, and is 28x34 feet, constructed of brick and divided into four rooms.

The Fostoria Grain Company was organized in May, 1913, and has been doing a track grain business



FOSTORIA GRAIN COMPANY'S NEW ELEVATOR AT FOSTORIA, OHIO

houses in the state, and will have a big season of usefulness.

The elevator is 42x48 feet on the ground and 125 feet high. Adjoining the elevator proper is a one-story warehouse, 42x48 feet, which will be used for feed storage. A 7-foot basement extends under the entire building. The elevator and warehouse are covered with galvanized corrugated iron.

There is a 16-foot working floor, on top of which is 49 feet of cribbing, surmounted by a cupola 60 feet in height. The cribbing is divided into 20 bins, giving storage capacity of 60,000 bushels. The car shed extends over both tracks and is 42 feet long. The side tracks have capacity for 50 cars—30 cars on the load track and 20 on the empty track—connected at both ends with the passing track of the

since June 1st. The officers of the company are J. L. Cruikshank, president; G. O. Cruikshank, vice-president; A. T. Ward, treasurer and general manager; Geo. L. Kraft, secretary.

Fostoria is especially well situated as a receiving and shipping point, having three east and west trunk lines, the Nickel Plate, Baltimore and Ohio, and Lake Erie and Western and two north and south roads, the Toledo and Ohio Central, and Hocking Valley.

The province of Alberta, Can., produced 64,560, 130 bushels of all kinds of grain in 1912, an increase over the 1911 production of 13,652,599 bushels. To aid the farmers in harvesting this crop, 8,000 harvest hands were brought into the province.

Grain Dealers' National Convention

Seventeenth Annual Meeting at New Orleans Draws Good Attendance—Government Corn Grade Discussion Occupies One Whole Day—Uniform Bill of Lading—Real Relation Between Shippers and Carriers—Splendid Entertainment and Social Features

The city of New Orleans does not occupy fifteenth place in the hierarchy of metropolises of this wonderful country. It is the first according to what grain dealers will say upon looking back to this semi-tropical city after the return home from attending the seventeenth annual convention of the Grain Dealers' National Association, October 14, 15, and 16.

For the South is surely the land hoped for, the kingdom of what should be, and the grain men of New Orleans gave their little principality unreservedly into the hands of their Northern guests during the week of the convention.

It was an important meeting in all respects. Large men in the grain trade were there to discuss large problems and yet there was intermingled business and pleasure, cold fact and mystery, for the prosaic only had its allotted time during sessions. Outside the hall of conference there was felt only the spiritual warmth that emanates from the well wishing host, and we have it from the ladies' auxiliary as well, that the time spent in this magical city was one of delight and enchantment, whether sojourning temporarily in the old Creole days and scenes of the past, or motoring among the newer parts of the city with its richer architecture, its splendid trees, its tropical foliage and its marvelous flowers.

Tuesday Morning Session

The morning session of the opening day was held in the Tulane Theater. All other sessions took place in the Assembly Hall of the Greenwood Hotel.

While the delegates were taking their seats, music was rendered by Braun's Military Band of New Orleans. The convention was called to order by President Charles D. Jones of Nashville, Tenn., at 9:30 a. m.

All present arose while the invocation was delivered by Rev. W. A. Barr, after which Joseph McCloskey, president of the New Orleans Board of Trade, made a brief and happy address of welcome. Mr. McCloskey introduced in his turn, M. J. Sanders, also of the Board of Trade, who reviewed the history of this organization, what it has accomplished in the past and its future plans and extended the wishes of the Board that the visitors' stay might prove to be so pleasant as to make them desire to speedily return to the city.

The president then introduced Hon. Martin Behrman, Mayor of New Orleans, who delivered the city's welcome to the delegates in an able and eloquent manner.

Mayor Behrman was to have been followed by Governor Hall of Louisiana, but the governor unfortunately had been called out of the state. He sent as his personal representative, M. L. Alexander,

who, in a few well chosen words delivered the message of welcome in behalf of the state.

The response to the various addresses of welcome was made by E. C. Eikenberry, president of the Ohio Grain Dealers' Association. Mr. Eikenberry said in part:

It is my high pleasure on behalf of the members of the Grain Dealers' National Association to express to you profound appreciation of your generous words of welcome and to assure you that their impression is deepened by the splendid spirit and courtesy with which they have been pronounced. From the North, from the East, and from the West, we bring you

by their foes in bitter civil warfare. Your gracious words of welcome have touched our hearts and for these we thank you again and yet again.

George H. Maxwell, executive director of the National Reclamation Association, talked on "Waterways and Land Reclamation; How to Increase the Grain Production of the United States." Mr. Maxwell's address was illustrated by slides showing views of government irrigation work in the West and the vast increase in wealth and grain production which this work had brought about. He pointed out that the great floods of the lower Mississippi and its tributaries could only be prevented by commencing at the source of these rivers and using these waters for power and irrigation purposes so that in flood times they could not swell the volume of waters on their way towards the Gulf.

The meeting was then adjourned for luncheon.

Tuesday Afternoon Session

Promptly at 2:30 o'clock, President Jones called the meeting to order and asked Chairman J. W. McCord, Columbus, Ohio, for the report of the Executive Committee.

REPORT OF EXECUTIVE COMMITTEE

Mr. McCord said that the details of the committee's work was included in the secretary's report, but gave a general summary as follows:

This committee is constituted as follows: J. J. Stream, Chicago; T. A. Morrison, Kokomo, Ind.; H. I. Baldwin, Decatur, Ill.; J. H. Cofer, Norfolk, Va.; and J. W. McCord, chairman, Columbus, Ohio. President Charles D. Jones and Secretary John F. Courcier are members ex-officio of the committee.

It is the duty of this committee to act for the Board of Directors between annual meetings at the request of the president and secretary of the association, on such matters of business and counsel as may be referred to it for action.

There have been no emergencies during the year requiring a formal meeting of the committee. The secretary, however, has consulted with me, as chairman of the committee, at numerous times by 'phone, correspondence, and personally, on business matters of the association.

The management of the affairs of the association has not been attended with any friction, difference of opinion, emergencies or conditions that would justify the expense of calling the committee together.

We wish to commend the efficient and indefatigable efforts that have been put forth by the president and secretary and the several important committees, all of whom have worked so zealously for the interests of the association. More work has been accomplished and greater gains have been made in all departments of the work, than during any previous year in the history of the association.

Upon motion the report was accepted and filed, after which the treasurer's report was called for. Secretary-Treasurer Courcier said that owing to his time being so completely taken up by other matters in such degree that he had had only six hours sleep



PRESIDENT CHARLES D. JONES
Nashville, Tenn.

greetings like that of brothers who would come and lodge with you, a boisterous hand-shaking "Glad to be with you" that smacks of the wide expanse of our western prairies teeming with life and the ardor and hardihood of the pioneer days, a hearty rollicking "Your guest I would be" that savors of winds of the Great Lakes, and the intensity of life and action in the great cities that lie close by them, or a conservative, measured "Your hospitality we accept," heartfelt just the same, fraught with the culture of New England and the calculating conventionality of our eastern seaboard.

We thank you for the facilities and environment which has been provided for our assemblage, all of which can but facilitate our labor and perfect its results.

Out of it all and through it all, we desire in the future to know you better than in the past, to make of New Orleans and Louisiana a city and a state that we have seen, to form acquaintance with your institutions and learn amidst the scenes in which it was enacted the record of a glorious past and to marvel at the commercial solidity and civic development of a city and state that but fifty years since lay ravaged



THE CENTER OF THE BUSINESS DISTRICT, NEW ORLEANS

in three nights, that the report was not completed and he asked that it be deferred.

Upon motion by Martin Bullitt, duly seconded, it was unanimously agreed to pass the report provided the treasurer made public his recipe for staying up three nights and days on six hours sleep and continuing to look fresh and in good condition.

Mr. Courcier said that if Mr. Bullitt would write out the recipe he would sign it.

for instructions on the subject. And in more than one instance have I had to disappoint Mr. Reynolds by telling him, "I am sorry, but I do not want you to incur any further expense than you and your committee have already incurred, in addition to giving your time, but we simply cannot send you." And for that reason I asked the permission of our Board of Directors to solicit a fund for the exclusive use of your Legislative Committee. They granted my request; we issued the call, but the response has been very nominal.

general, however, we recommend that he have authority to decide all cases of appeal as to grading in his market or in any territory over which he may have jurisdiction.

We recommend further that the country be divided into various districts for the purpose of convenience in having a system of supervision instituted; to this end that a number of competent supervisors be appointed, whose duty it shall be from time to time to investigate the inspection of grain in various smaller markets where supervision has not been established.

We recommend further that the system be extended from time to time as conditions warrant.

We recommend further that the scope of authority of the supervision of inspection be limited to grain that has already passed into interstate commerce or is intended for interstate shipment.

Resolved, that we recommend that the Legislative Committee of the Grain Dealers' National Association be requested and authorized to use its utmost endeavor to have such a bureau as herein briefly outlined established.

Mr. Reynolds said that it showed the results of very mature thought on the part of the Legislative Committee, not being included in the report for obvious reasons. He stated that the best time to consider the resolution would be before the discussion on corn grades came up. It was moved by Mr. Wilkinson that in view of the fact that it was such a long resolution, involving many intricate problems, that it be left to the Committee on Resolutions and they be instructed to report on it immediately after the corn grade discussion. After some further discussion the motion was carried.

REPORT ON TRADE RULES

A. J. Tyng of Peoria, as chairman of the Committee on Trade Rules, was not present and the report of the committee was read by another member, E. C. Eikenberry. The report showed that the committee was called upon too frequently to give interpretation of the trade rules, and suggested that to obviate this necessity the following changes in the rules be adopted:

Rule 4 (a). Confirmation (Current Rule).

(b). When either of the confirmations contain provisions at variance with the conditions expressed in the card or other written or printed bid, the latter shall govern, except when each party to the contract waives the irregularity by signing the confirmation, in which event the confirmation thus signed shall be understood to express the terms of the contract.

Rule 5. Time of Shipment or Delivery: In making contracts, a specific time in which shipment or delivery is to be made shall be mentioned. Any given num-



A GROUP OF PROMINENT GRAIN MEN

Reading from Left to Right, President Charles D. Jones, Ex-President A. E. Reynolds, Ex-President E. M. Wayne and C. A. Ashpaugh, President of the Indiana Grain Dealers' Association.

A. E. Reynolds, chairman of the Legislative Committee, submitted a lengthy report dealing with the work accomplished by that committee since the last meeting. He dealt with the effect that the recent change of political power had had upon the grain business and some of the legislation proposed or passed during the year. Among these were the Cummins Amendment, the Pomerene Bill and the Henderson Elevator Case. The report condemned the abolition of the Commerce Court and urged that every effort be made to secure money to allow the Legislative Committee to pursue its work in efficient manner.

SPECIAL FINANCIAL RESOLUTION

A resolution was next presented by Martin Bullitt, reading as follows:

Recognizing the great work done in the past year by the present administration of the Grain Dealers' National Association, and realizing the immense amount of work that must be done within the next twelve months, in order to keep the association up to its present standard of usefulness, it is now

Resolved, that the meeting pledge itself to at once put its Executive Committee into proper financial condition to continue its work; and,

Resolved, that the Chair appoint a special committee of ten, which shall be charged with the work of raising the necessary funds.

Mr. Brown remarked that in order to get the resolutions before the House at that time it was necessary to obtain the permission of the Convention. Upon motion by Mr. Brandeis, seconded by Mr. Williams, permission was granted. Considerable discussion then ensued, Mr. Williams pledging the Louisville Board of Trade for \$200 and Mr. Brandeis putting himself down for \$100. Mr. Richardson said that he did not think it fair to the members who were not present to start pledges at that time, but that he thought there would be no ultimate trouble about it.

A. E. Reynolds lauded the work of the administration and said that it would be a disgrace to the grain trade if things were left in the present financial straits. President Jones asked the vice-president to take the chair while he addressed the meeting. In the course of his remarks he said:

To say that all of your officers have been embarrassed and handicapped in the last twelve months is expressing the matter mildly. I have had letters from different committeemen requesting funds with which to proceed along certain important lines. I have had letters from the chairman of our Legislative Committee calling my attention to the necessities of the committee on some particular point, at some particular place, and on some particular question, and asking

The resolution was then put to a vote and carried. It was suggested by J. C. F. Merrill of Chicago that in order to keep the record clear the report of the chairman of the Legislative Committee be received, approved and spread upon the minutes. There was no new discussion upon this and the motion was carried.

RESOLUTION ON FEDERAL SUPERVISION

A. E. Reynolds then presented the following resolution:

Resolved, by the Grain Dealers' National Association, in convention assembled at New Orleans, that it here-



E. C. EIKENBERRY, PRESIDENT OF THE OHIO GRAIN DEALERS' ASSOCIATION, AND FAMILY

by renew its former declarations regarding the supervision of the inspection of grain. Be it further

Resolved, that we recommend to the Department of Agriculture the establishment of a bureau under that Department for the supervision of the inspection of grain that enters into interstate commerce.

It is our belief that such a bureau of supervision can carry out the supervision of inspection of grain under the standards when they are finally established to much better advantage and at very much less cost than this result can be obtained in any other way.

We recommend the establishment of laboratories in charge of competent supervisors in each market of the country that has handled in the past year seven million bushels or more of grain. The duties of such supervisor to be prescribed by the Department. In

ber of days shall mean calendar days, excluding date of sale, in which to load and ship grain to apply on a sale for shipment, or to deliver at the agreed destination, grain sold for delivery.

The word ship when used in the rules shall mean that shipping instructions shall have been filed with the Railroad Company by the shipper.

Grain to apply on a sale for shipment must be actually loaded and billing instructions must be furnished the Railroad Company in accordance with the custom in vogue at the shipping point.

In using the words "immediate," "quick," and "prompt" the following meanings shall be implied: "Immediate," three days; "quick," five days; "prompt," ten days.

Where no specification as to time of shipment is

named in the contract "prompt" shipment shall be implied.

Rule 7. Incomplete Shipments: When the seller finds that he will not be able to complete a contract within the agreed limit it shall be his duty to at once advise the buyer by mail, telephone or telegraph, whereupon it shall be the duty of the buyer at once to elect either to buy in or to cancel the deficit, or, with the consent of the shipper, to extend the contract to cover the said deficit.

Upon failure to receive notice of shipment, after the expiration of the shipping limit as specified in the con-

buy-in, extend or cancel the original contract for account of the seller, notifying him at once of such action.

It was moved by E. P. Peck and seconded by J. J. Stream that the report of the committee be printed so that it could be distributed and thoroughly understood by all members for consideration Thursday morning. Motion was carried.

No reports were received from the Membership Committee, the Hay and Grain Joint Committee, or the Demurrage Committee, the chairmen of all three being absent.

Gardiner B. Van Ness, Chicago, chairman of the Committee for Telephone and Telegram Service, submitted an interesting report in which special emphasis was laid upon the private wire evil. He showed how great an injustice is done to the general public in the provisions of the private wire contracts, which the committee had referred to the In-

about such service, and to see to it that the facilities of the public companies are not farmed out to and monopolized by the few, but are made available to all alike on equal terms, and to this end we recommend that the adoption of this report carries with it instructions to the incoming Telephone and Telegraph Committee to press the advantage already gained in getting the subject before the Interstate Commerce Commission, and that the general membership take an active interest in the work by preserving and promptly forwarding to the Telegraph and Telephone Committee all data concerning instances of faulty or unsatisfactory service.

This report followed the usual course. The president then announced the following temporary committees:

Nominating Committee: E. M. Wayne, chairman, Illinois; John T. Gibbons, Jr., Louisiana; F. S. Cowgill, Nebraska; Charles A. Ashpaugh, Indiana; Charles Rockwell, New York; Bert K. Smith, Texas; L. F. Gates, Chicago, Ill.

Resolutions Committee: H. S. Grimes, chairman, Ohio; S. W. Strong, Illinois; E. E. Wilkinson, Alabama; A. Brandeis, Kentucky; John L. Messmore, Missouri.

Auditing Committee: J. W. McCord, chairman, Ohio; J. J. Stream, Illinois; Thomas L. Davis, Tennessee.

No further business was taken up and upon motion duly seconded, convention adjourned for the day.

Wednesday Morning Session

President Jones called the session to order at 11 o'clock and advised the members that it was not to be an official meeting of the association but a conference with Dr. Duvel, representing the U. S. Department of Agriculture, with reference to the proposed Federal Corn Grades. He also stated that Dr. Duvel had no authority to take up anything on the line of supervision so that that would not enter



HON. MARTIN BEHRMAN
Who Delivered Address of Welcome

tract, the buyer shall immediately elect either to buy in or cancel the contract and notify the seller by wire that unless he, the buyer, be in receipt of notice, by wire, within 24 hours, advising that shipment will be completed within 48 hours, he, the buyer, will, at the expiration of the said 24 hours, exercise his choice either to buy in or to cancel the said contract, and render a statement to the seller for all loss incurred.

Rule 15. Interior Shipments: Grain sold on the basis of "regular market terms" cannot be forwarded to interior points by the buyer without the consent of the seller, and the same rule shall apply to Terminal market sales that do not contemplate public official weights and inspection.

Rule 23. Weights and Inspection of Grain Sold Destination Terms: (a). On grain sold track-loading station, or delivered basis destination terms, it shall be the duty of track buyers, receivers, millers and consumers of grain at points of destination where no regularly constituted rules and regulations are in effect, first, to obtain the consent of seller to make such delivery and then furnish to the seller sworn or public certificates of weights and grades; giving the post office, date, name of elevator, mill or warehouse, where weights were obtained, name of the weighmaster's employer, name of the weighmaster, location or description of leaks, if any, the seal record, the railroad agent's written acknowledgment of said leaks or other bad order conditions, when and where the grain was unloaded, and the original paid freight bill, on grain sold delivered.

(b). On a sale shipper's weights and grades it is understood shipment must be made by the seller from his own station, or stations on same road that operate under the same tariff rates, regulations and conditions, and he must furnish the buyer sworn certificates of weight, unless otherwise agreed at time of sale.

Rule 26. Off Grades. It shall be the duty of receivers, track-buyers, and distributors of grain on regular market terms, to notify seller of any failure to grade, so he will receive such notice within 24 hours from date of inspection. The buyer then shall either apply the grain on contract at ruling market difference on day of arrival, or let the notice to seller be by wire, of that date, giving the conditions of the grain, stating whether unloaded or still on track; whereupon it shall be the duty of the seller receiving such notice to wire disposition at once. Off grade grain sold for account of shipper shall not apply on contract.

Rule 31. Seller's Inspection: Grain sold for delivery, seller's inspection, shall be covered by an inspection certificate of the grade contracted. The submission of a certificate of a lower grade to apply on a contract for a higher grade, shall be authority for the buyer to sell the grain, represented by such certificates, for the account of whom it may concern, and proceed to



THE SECRETARY AND HIS STAFF
Reading from Left to Right, Secretary John F. Courcier, Arthur Grato and Charles Quinn.

terstate Commerce Commission, eliciting from the Commission a promise that the whole matter would be brought up for inquiry at a date in the near future of which due notice would be given.

Several articles in the private wire contracts received particular attention, in which it was pointed out that not only were the contracts unfair upon their face, but in addition, they were continually violated in favor of the private wire concerns. In closing he said:

Your committee feels that there is a great work cut out for this association in the obtaining for its members an equality of service from the telephone and telegraph companies. This is the one great thing to be sought. After it is obtained, regulations governing charges, and possibly other matters, should be looked after. But at the moment the one great blight that prevents a normal, healthy growth of the public telegraph facilities appears to be the system of leasing wires to individuals, and in the opinion of your Committee the one big point to be fought out before the Interstate Commerce Commission is the question as to whether or not it is lawful for a public service corporation, itself the beneficiary of special privileges granted by the Government, to lease its facilities, intended for public use, to individuals when such action results detrimentally to the general public.

The grain trade is one in which instant telegraphic and telephonic communication is essential to the safe and proper handling of the business, and the duty rests upon this association to do all in its power to bring



FIRST VICE-PRESIDENT LEE G. METCALF
Illinois, Ill.

into the discussion. The subject of standardization alone would be reviewed.

Dr. Duvel then addressed the meeting with the aid of stereopticon views, saying in part as follows:

We have formulated these grades, keeping in mind, as servants of the people, to put them on the basis that will be the greatest good, and to the greatest number; and I will also say here, if we fail in the fixing of these grades, to be uniform in all the markets throughout the United States, so that producers, and consumers, as well as the dealers, will know what the grades are, and will thereby be able to improve the quality and condition of our corn, to encourage better methods of handling on the farm, and to raise the standard of our commercial market, and bring forth this very forceable question which has been discussed throughout the country for months and months, to produce more corn

of a better quality, then I would feel that these grades have been, to a considerable extent, a failure. My principal interest in this is to produce better corn when it goes to the market under present conditions. The losses, naturally, due to deterioration after the corn goes to the markets, amounts to millions of dollars. We have, however, no way of determining this very accurately.

F. F. Collins: Doctor, do you think that the dry corn will absorb some of the moisture from the natural corn?

Dr. Duvel: Yes sir. I am presenting this data in connection with our export corn, not in behalf of the European buyer, not as a criticism of our exporters, because they are compelled to export about as much corn as we have, but to show that we must have dryer corn if this country is to maintain a high standard, or rather to recover its high standard in our international trade in grain. Some of the first data we collected in Europe—those observations cover 505,000 bushels. From 16.1 to 18, covering more than 3,000,000 bushels, we have 18 per cent; we have gone beyond our limit of 17½, which we feel is safe for transportation or shipment.

Lee G. Metcalf: What was the condition of that crop in 1905?

Dr. Duvel: I could not tell you what the moisture content was except this, it represents the corn that the United States exported during that year.

Mr. Collins: Doctor, wasn't that the poorest crop in the United States, in 1905 and 1906?

Dr. Duvel: I would have to look that up. Of course, our data as to the quality of corn at country points does not extend back as far as that. This work was undertaken in the fall of 1906, we began to study the conditions at country points, and in the terminal markets, which, of course, covers the crop of 1906. The first year's work was carried on mostly in Europe, to study the condition of the corn as it arrived at that point.

Dr. Duvel continued his talk about an hour, showing a number of lantern slides and thoroughly demonstrating how they had arrived at the proposed grades.

The convention then adjourned for luncheon.



JOSEPH McCLOSKEY
President of New Orleans Board of Trade, Who
Delivered Address of Welcome.

Wednesday Afternoon Session

At the beginning of the afternoon session Dr. Duvel again took up his address and demonstration, being frequently interrupted by questions from the delegates. He said:

Here is a shipment in the spring of the year, handling corn which is winter shelled, coming out of the elevator, we find moisture of 18.2 with a loss of 1.23 and 1.66 per cent, the explanation again being in this increased temperature, the temperature reaching from 120 to 130 degrees. With 17.8 per cent of moisture we have a shrinkage of .3 and .55 of one per cent, also a shrinkage with 16.9 of moisture of .39 and .59 of one per cent.

But you see all of these cars in the first, second and third groups of cars all show an increase in temperature at the end of the test. In other words, the corn would get out of condition, and would, perhaps, I do not remember what that corn grades now—it would perhaps either be graded No. 4 or sample grade. So, when I said this morning in connection with our limit of 15½ per cent of moisture for No. 2 corn, you cannot, in that case, be absolutely sure that the corn is going to carry through, because much depends, and a great deal at

ture, then, you are very likely to get that corn to go out of condition.

Mr. Rockwell. With the germ still alive in the natural dried corn, would it not tend to heat quicker than one which had been kiln dried and, therefore, the germ destroyed? Is not 15 per cent kiln dried corn better to keep than 15 per cent natural dried corn.

Doctor Duvel: I can answer that best by saying this, if the corn is of the same degree of soundness we have no reason to believe that there will be any difference. You must remember this, however, under present commercial practices, that 15 per cent kiln dried corn is not comparable to 15 per cent natural dried corn. One has been through a hospital and the other has not, and they will not stand up together.

Now, we published in connection, when we announced these rules, the question of acidity. We did not put this in the grade rules, because we feel that the trade is not ready for it. I will say, however, that it is an important factor and perhaps the only factor, or the very best factor that we know, to determine the soundness of corn, and no man who is storing large quantities of corn, can afford, for his own protection, to store that corn without knowing the acidity, or, in other words, without knowing the soundness.

Now, if you test your 15 per cent kiln dried corn and your 15 per cent natural dried corn, in seventy-five per cent of the cases, under commercial conditions, you will find the acidity of your kiln dried corn much higher than your natural dried corn. It is just like comparing the work that a well man can do with that which another fellow can do that has just recovered from an attack of typhoid fever, or some other illness. But we say further, that if you will take corn and dry it properly when it is still good and sweet, and in good condition, it will stand up equally well with natural dried corn. I will go further, that I think, by far the greatest quantity of the dried corn in this country is not dried properly. I will also add that it is the practice in most cases, although this has been disputed by some of the grain men, but our data, nevertheless, bore out that this is the case, that most of the grain is not dried until it starts to go out of condition. No grain man, it is perfectly natural, intends to dry that corn if he can get rid of it at greater profit to some one else before it goes out of condition.

Mr. Bingham: Eliminating the question of acidity, the natural dried and the artificial dried, to the point of 15 per cent, has the natural, considering everything else being equal, any advantage, over the artificial dried? I think that is what the gentleman means to ask.

Doctor Duvel: Well, I would take the natural dried corn. You have, of course, in your kiln dried corn a much heavier breakage. It won't stand the handling that your natural dried corn will, and handling through the elevators, you will break it up and get a higher percentage of finely broken corn and meal; that, of course, will affect its keeping qualities.

Mr. Jones: Don't you get that broken condition of the corn by the sheller?

Doctor Duvel: Yes, in certain seasons of the year,

that, on the length of time that the corn has been shelled.

Mr. Dorsey: If it contained only 14 per cent of moisture, then, would there be any certainty of its carrying?

Doctor Duvel: No, sir.

Mr. Dorsey: Would it be more certain to carry than the 15.5?

Doctor Duvel: Yes, it will do that. Even 14 per cent corn sometimes will get out of condition.

Dr. Dorsey: Is not that caused by dirt?

Doctor Duvel: Dirt has a certain influence—finely broken dirt. You take 14 per cent corn in the summer time when the temperature is high, when corn at that temperature will normally hold only 12 per cent mois-



DELEGATES ASSEMBLED IN THE CONVENTION HALL

especially during the latter part of November and December. In shelling when the corn is not in condition to shell, and I may say, is not in condition to market, although they attempt to market and do market it, the sheller will tear up a great many kernels, and those broken kernels, by the way, up to that time, will not be taken out through the four by four screens which we have designated at that season of the year.

Now, from the standpoint of the dealer, I do not want you here to believe, or to feel that we are playing into the hands of the producer, or into the hands of the con-

season, will heat. That theory prevails through the Corn Belt.

Doctor Duvel: The germinating season is nothing more than this: it comes in the spring of the year when you have an increase in temperature. Now, you produce those conditions at any time, and your corn will begin to heat. You can test that, or determine that, by putting a lot of corn in a sealed jar. If you keep that jar at a low temperature, you will have no difficulty. Just as soon as you raise the temperature so that the corn contains more moisture than it should normally

place all markets under the ban and state to the department that they are damned thieves.

Mr. Cofer: With all respect to our friend from Toledo, I want to say that as receiver of grain in Norfolk, we have had in the past corn inspected as No. 2 in Toledo that came to Norfolk and tested 19.2 per cent on a Hess Testing Machine.

The President: I rule you are out of order and the general discussion is out of order. I will ask you not to discuss conditions as they exist on the different markets. We came under invitation to discuss these rules, and not the application of any rule that today prevails on any market or any condition that prevails on any market. If we go on with the subject which is now started, we might as well go home.

Mr. Smith (Fort Worth): I appreciate the strength of the statement, but Doctor Duvel has made the statement that was occasioned by his experience and by his investigation. What I would say is not intended as a slam at any one, nor any inspector, but Doctor Duvel's experience led him to make the statement that he did. We have had No. 2 kiln dried corn at Kansas City under certificate, and it would get to Fort Worth as sour mash. It is his experience that caused the statement.

The President: I rule that this is entirely out of order, and must insist that nobody ask for the floor on that subject again.

Mr. Bingham: Doctor Duvel represents the greatest firm on whose existence God ever put his sanction, and he has got the right to stand up here and give us his experience. He has accused no man and no market of anything in particular, and the brick that he threw out in the audience with good intentions, no matter who they hit, let him keep quiet and not yelp, until he is through with his statement.

The President: Let us proceed strictly along the lines for which we assembled.

Doctor Duvel: In connection with these grades, I want to present this proposition for your consideration—not with the idea that we are going to adopt it in this haste, but to show you the comparisons.

If we can get a system of grading whereby they could certify a specific grade as to moisture, as to rotten corn and dirt and grade as to broken corn, it would help materially in improving the quality and the condition of the corn, and put the shipper in a condition to improve his corn.

The President: The whole subject is open for discussion on the part of you gentlemen.

Mr. Powell: Omaha, Neb., is the largest city in the geographical center of the United States, and our market is known as a home market. We receive grain direct from the producer through the little country elevators. It goes direct to our market, going through there, and passes through the commercial channels and



HOTELS WHERE THE DELEGATES AND VISITORS REGISTERED

At the right is the Convention Headquarters, The Grunewald; at left, The De Soto; at top, The St. Charles; at bottom, The Monteleone.

sumer. As I said this morning, we have made an effort to fix these grades so that there will be the greatest good to the greatest number, and the dealers, I can say, need have nothing to fear, unless it is the loss of their unscrupulous competitors.

Mr. Gates: This matter of supply and demand does not work out the way you have stated. If you want to get your figures and discount on off grade corn, it is a physical impossibility to handle the movement of off grade corn that is going to market. It is not a matter of manufacturing; it is a matter of the impossibility of drying the amount of corn that is being shipped and marketed, because the country, you will see, does not care to hold it. Is there anything in this plan that would offset that?

Doctor Duvel: It will offset it in this way: You will not agree with me, and a great many of the shippers will not agree with me, or a great many receivers. With uniform rules properly lived up to, the shipper will be able to ship his corn where it is in the greatest demand, and not be able to take the discounts when the market is overcrowded and receive a higher price, or, rather, a small discount, when corn is in demand in those given markets. In other words, to be more plain and frank, the present system of grading, in the majority of markets is this: Prices and quotations are sent out on the basis of a certain grade. In that market—if the supply going to that market exceeds the demand—they grade it down; if the demand exceeds the supply, he will get a higher grade on it.

Mr. Gates: Where? (Several voices cry "Everywhere.")

Doctor Duvel: Everywhere. Now, what we contend, uniform grades, if they are established on the same basis in every market, is that a man who gets quotations and who gets freight rates and knows what he has to ship—if he can ship to a market making the best quotations—he is not only doing the most for himself, but is likewise doing the most for the people of the country, by being able to meet a certain demand.

Mr. Moore: Do I understand your position to be, take Chicago, for instance, as an example, that if the supply of corn No. 3 in Chicago is more than adequate to meet the demand, that No. 3 shipped from the country to Chicago, is arbitrarily graded as No. 4, when it arrives at Chicago? If that is your position, I don't agree with you.

Doctor Duvel: I will not mention any market, but I will say that there is a very great tendency to do that in any market, and when you study the conditions, you will find out that this is the case.

Mr. Radford: There is a belief that during the germinating season—May, June and July—that all shelled corn held in elevators will heat. Is that a fact? Doctor Duvel: That depends very largely of the moisture content and the soundness of the corn.

Mr. Radford: The theory is that any corn, no matter what the moisture content is, during the germinating

contain, at that temperature, if exposed to the air, you will start fermentation, and that is what happens when you put heat to corn in the summer time—your corn will contain more moisture contents than it can hold at any temperature.

Mr. Ware: I want to disagree in regard to the remarks made about corn, as stated by Doctor Duvel,



IN FRONT OF THE GRUNEWALD HOTEL

when the market was in different condition, regarding the grading up and down. Mr. Maurice, of your department in Kansas City, has checked the work of this department of which I am Chief Inspector, and we have had only few cases less than one-half of one per cent variance in our tests, and as to grades checked by this department, I will say that there are only four, that have come to my knowledge in checking up the work or grades of the Kansas City Board of Trade Grain Department by your department. So I am going to take exception, so far as my department is concerned; that is, checking your own work.

Mr. Culver: I do not believe Doctor Duvel meant what he said. I do not believe that Doctor Duvel would stand on that platform and charge me with making a deviation from the uniform rules for anybody in Toledo, which has never occurred, and if such conditions do occur, in any of the markets of the United States, I believe it is Doctor Duvel's place to publish it and not

across the ocean. Our members of the Grain Exchange have weighed the matter of these tentative grades very carefully in the interest of the producer and the country grain dealer and our terminal markets. We have prepared a little pamphlet here, a summary of what we think should be under discussion here as to this tentative grade question, and I thank, on behalf of the members of the Omaha Grain Exchange, the president and members of this meeting for the opportunity of reading this little pamphlet.

Mr. Collins: If these rules, as formulated by the Government, be adopted, how could they be applied direct to the different terminal markets, with the difficulties we have with our tremendous receipts at times, and congested terminals?

Dr. Duvel: Of course, from the standpoint of the terminal market and the actual handling of the stuff in the terminal market, that is a question with which I am not as familiar as you yourself. But we look at it in

this way, that it is not going to increase the amount of corn that goes to market. It is simply the fact that they are going to call it by a different name—more names for the same amount—and it seems to me that they could handle it as well one way as another.

Mr. Wilkinson (Birmingham): Most of us here today are here because of the deep interest in the subject which is under discussion. Many of us have invested all that we have in the enterprise that is to be governed by these proposed rules; many of us have spent our lives in this one vocation. I am a young man, and I have been in this business thirty years; I thought I knew something about corn until today, but I am free to confess and admit that I have learned more about corn today than in the thirty years I have been dealing in it. I don't believe there is a man in this room that can spend every minute and every day that is allotted

will have to have the commercial grade of No. 3 instead of No. 2 corn. Now, Mr. Chairman, in conferring with the exporters before I left home, there was some difference with them as to the classification of these grades. Expressing their sentiments, and the sentiments of the receiver, it is our judgment that these standards, if they are adopted as proposed by the Government, would be a little too severe as I have stated, in the moisture and for domestic purposes, would allow a little too much worthless material, and, for that reason, we have raised the moisture and lowered, in some instances, foreign matter. Now, the question was raised as to the supervision. Mr. President, will you permit me to make an additional statement, which I overlooked? We think there should be a provision made for kiln-dried corn in the germinating season. We buy nothing but kiln-dried corn, and under the rules of our Exchange the moisture content is so low in the germinating season that we recommend to the farmers that they buy kiln-dried corn. Therefore, we have established rules for kiln-dried corn. So we recommend that kiln-dried corn be so marked as No. 2.

Mr. Collins: I was very glad to hear Dr. Duvel say that they established No. 5 corn, and the question that it should be sweet, but recognize the fact that it would not keep very long. The Chamber of Commerce felt, for that reason, that they should not recommend No. 5 corn, but determined to let No. 5 go into the sample grade. We desire to present to you the following as a substitute, as formulated by the Agricultural Department of the Government.

A. F. Leonhardt: Our New Orleans market is satisfied with the grades tendered by the Agricultural Department. We think, as the preceding speaker says, that, if you reduce the No. 2 numerical grade, you will have less dispute. We have a No. 5 corn established for the past two years, and since that time we have had fewer arguments than we ever had before. If you want four grade reduced, why not reduce it down to three. I think the grades as have been tendered are eminently fair, and our markets have endorsed them.

J. C. F. Merrill: It is a well settled economic truth that the commerce of a nation in any commodity centers in that grade or quality which is most abundant and which fairly well meets the requirements of commerce, and this applies itself to corn as well as to any other commodity, and, perhaps, more forcefully than to some. Conditions in our country regarding corn have been changing very rapidly and steadily for the past fifteen or sixteen years. In 1894 we produced twelve millions of corn, and in 1895 we produced sixteen millions of corn, an average of fourteen millions for the two years as against thirty-one hundred and seventy-one millions last year, last year being more than twice what we formerly produced. What we produced then so fully answered all of the requirements—domestic and foreign—that the surplus became so burdensome that the price went down in September for contract corn, much of it two years old, all of it thoroughly cured—mark you, in September, it was on the 17th, that it sold at 19½ and 19¾ cents, that being the range of the market on that day; and the range of the October future was 19¢ and 20 cents. Under those conditions, there were no questions about moisture content in corn.

change has brought us to the point—to the condition where no old corn of any consequence whatever is on hand on December 1st. That is true particularly of the Chicago market, to my personal knowledge, and I believe it is true—in fact, I know it to be—of other markets.

So we are confronted with a condition which has presented itself of late years, and the conditions are becoming a little more acute each year, and it should seem that it has been borne about as long as it can be and that irresistible, invisible force, necessity, compels us to do something, and the Agricultural Department, through its Bureau of Plant Industry, and its chief, Dr. Duvel, has been addressing itself most assiduously to reducing this trouble, if it can be reduced. We have brought ourselves, then, to the position where commerce



C. B. FOX
New Orleans Entertainment Committee

to him by God Almighty that can acquire any information such as has been put, to us today on corn.

I, for one, am willing to admit that the Agricultural Department has made a study of this far deeper than it will ever be possible for me to go, and I will admit that the Agricultural Department has gone into this only for one purpose, and that is to straighten our constant troubles, constant quarrels and constant losses, and to so adjust the trade that it can be carried on with the least possible friction between those who produce, those who consume, and those who deal in this commodity. I want to take off my hat to the Agricultural Department and to congratulate them on having had such investigations as have been given us by Dr. Duvel. I believe that the corn raiser—he may think it is a little hard to say his corn is number four or number five—I believe that the application of these rules will stimulate the corn raiser to raising better corn that will make him more money, because the losses will not be incurred that have been incurred in the past, and I for one state that I am ready to take the grade laid down by Dr. Duvel—stock, barrel and all—and I wish I had them twenty years ago.

J. L. King: I represent the Commercial Exchange of Philadelphia. I wish to say that we come from the opposite part of the country that our gentleman friend from Texas, and we have to give a little bit of different idea in this matter than has been stated, although I want to say that we are here to co-operate with the Government in its efforts to bring about standardization, and, in doing this, we have taken their grades and we have made here what we think is a practical solution of it, based on the experience that we have here; we are here to give that experience to the Agricultural Department. We do not say that it is absolutely right, but it is our experience and it is the best that we can do. We think that the grades proposed are just a little bit safer on the moisture content. Now, you would expect this is because we receive this corn, but, on the other hand, we export it; and, of course, we have to make a standard which will be practical. We feel that on moisture they are a little too severe, while on the percentages, as worked out, we feel that they can be reduced to the sum, and we have made here a comparison, which I will give to the official reporter; and Mr. President, with your permission, I will state what our idea is.

The President: I think that is the kind of a conference that Dr. Duvel would like to hear.

Mr. King suggested the Philadelphia grading, No. 1, 15 per cent; No. 2, 16 per cent; No. 3, 18½ per cent; No. 4, 20 per cent; No. 5, 22 per cent, and the elimination of No. 6 grade. Continuing he said:

If these standards are adopted, the export markets



E. NATHAN
New Orleans Entertainment Committee.

in new corn from the late fall or early winter months is of necessity the only commerce in corn possible in the country, because it has not had time to dry out and because the farmers do not let it stand on the stalk in the field as they formerly did until after Thanksgiving Day, in December, and frequently past New Year's, but instead pick it, husk it, crib it, and get the work all cleaned up by Thanksgiving day. So we have vastly different conditions, and those are the conditions that we must remember we have to deal with.

And yet, commerce can satisfy itself, and those of you



AN OLD STREET IN THE FRENCH QUARTER

The cribbers of that corn (and there were a couple of hundred millions of it in cribs) hedged in the Chicago market and tributary to that market. They had refused to buy it until it was safe to crib, and then they put it under good roofs and they took good care of it. But, as our population has increased, and our consumption has increased faster than our production, our export has fallen—take all of the grains raw and manufactured—from 49.68 per cent to 10 per cent last year, and we are now exporting of our corn crop only about 3 or 4 per cent. So, a great change has come, coming along from that condition when we had an oversupply of dry corn, we have found during the last five years that

who want to buy a given quality of corn will never have any difficulty in buying that quality if you want to pay the price. My friend from Texas, or my friends here in New Orleans, who want 14 per cent corn will have no trouble whatever in buying it if they are willing to pay the price of 14 per cent corn; and if any man thinks that he is going to legislate quality into corn and thereby through legislation get 14 per cent or any other per cent of dry corn without paying for it, he is mistaken in his mental processes.

There is a common desire—it is innate in every human heart to get something a little better than your neighbor has at a little less price so you can compete

with him successfully. In every neighborhood, you will find that there is some man who will buy the cheapest thing that will answer his purpose and at the same time assume risk that is not perhaps warranted by good commercial practice, and we have found that to be true with our foreign trade; they have been advised that they can buy dry corn, but they are still buying the cheapest corn they can and take a chance on it arriving safe. And the same thing obtains in our own country. And now we are down to a consideration of the main question, which through the courtesy of Dr. Duvel meeting with us here today is made possible.

The trade centering in the central Middle West, Chicago and its nearby sister markets, have talked about this matter a good deal; they have come to a conclusion, and when this body shall have resolved itself into the Grain Dealers' National Convention again,

you," and they might say it in a little more forceful terms.

So, we have as a starting point, the farmers to consider, and then we have the great commercial body throughout the country, as I said at the outset, that the economic truth is that the commerce will center in that commodity which is most abundant, which will answer the purpose, and it also will, after it has become well and deeply rooted, and the practice has become well and widely known, will depart very reluctantly from that practice, and that is involved in changing our grading of No. 3 corn. So that, changing

has formulated tentative grades to be applied to corn moving in interstate and foreign commerce; and,

"Whereas, this governmental action has aroused the widespread and general interest throughout a large section of the country; and, whereas, the Department of Agriculture, through its representative, Dr. J. T. Duvel, Crop Technologist of the Bureau of Plant Industry, and the Grain Dealers' National Association in convention assembled in the City of New Orleans, have devoted the day of October 15, 1913, to a formal conference on the questions thereby raised for a wise and practical solution of the same; and,

"Whereas, it is most desirable to not disturb well established and deeply rooted practices of the commerce in corn throughout the country; therefore be it

"Resolved, that it is the sense of the Grain Dealers' National Association that the grades proposed by the



DIRECTOR A. F. LEONHARDT
New Orleans Entertainment Committee.

it will present a resolution, and I don't know that I shall do anybody any violence in any way, and I think that I shall extend to Dr. Duvel a courtesy if I make known now what the proposition will be, and, in making it known, I want to say to you that it represents a highly important territory with reference to production, and in that production I want to remind you that if Dr. Duvel were to go to the farmer and tell him, or tell them that he was going to fix it so that their No. 3 corn would be graded No. 2 corn, I am sure, Dr. Duvel, that they all would hail you as their greatest friend, and would reverently say "God bless you." To the contrary, and by the same logical analysis, Doctor, if you were to go to them and tell them that you are going to reduce that grade which is 45 per cent of our receipts at Chicago, during the early winter months, and perhaps throughout the entire country is classified as No. 3 corn—if you were to go to them and tell them that you were going to reduce it to No. 4 corn, I am very sure that they would not say, "Dr. Duvel, God bless you," but they would say, "Dr. Duvel, we will not bless



A PAIR FROM ILLINOIS

Lee G. Metcalf, President, and S. W. Strong, Secretary, of the Illinois Grain Dealers' Association.

our grade so our No. 3 will become No. 4 corn, and thereby our great commercial grade during the early part of the year will be No. 4 corn, and we shall have the same corn, and the same quality, but have another name. We have a cure, as least I hope, for that, and I am going to read to you the resolutions which I hope I will have the opportunity to offer in a formal way—it is offered to you now informally:

The Merrill Resolution.

"Whereas, the Department of Agriculture of the United States, acting under the authority of Congress,

Department of Agriculture in the main be and hereby are approved, but that a change in the name of one grade and the numerical position of three grades is desirable in the interest of commerce, whereby long continued practices will not be materially or injuriously disturbed; and be it

"Resolved, that, to this end, it is the sense of the convention that the grades of No. 1 corn and No. 2 corn, as proposed by the department, shall be agreed to, but that the grade as proposed by the department as No. 3 corn, with a maximum moisture content of 17.5 per cent shall have for its name standard corn, and that the remaining three grades proposed by the department as Nos. 4, 5 and 6, shall be numbered 3, 4 and 5; and, be it further

"Resolved, that inasmuch as the requirements pertaining to percentage of dirt, unsoundness, broken grains and foreign matter of the several grades formulated by the department are not dissimilar from those contained and specified in existing rules; and, inasmuch as the practical working of existing rules has shown the error



R. C. JORDAN
New Orleans Entertainment Committee.



A GROUP OF LADIES AT THE CONVENTION

of the absolute exclusion of mahogany corn from the grades below the grade of No. 2, that it is the sense of this convention that the word "mahogany" be eliminated altogether from the stated requirements for all grades below standard corn; otherwise, the percentages as proposed by the department be agreed to."

Mr. Dorsey: I had forgotten that we participated in the conference which has been previously referred to. We sent our honored and worthy secretary, who is now unable to attend to his duties, and we participated, and I think Secretary Riley, of the Grain Dealers' Association of Indiana, and possibly a secretary of

as well that the grain men and the Boards of Trade meet the question fairly and squarely that has been presented to them by the Government officials, and not seek to dodge.

It may be true, as Mr. Merrill says, that you can go to the markets of this country and get the kind of corn that you pay for, but I want to say that the records prepared by Dr. Duvel here today show that when you buy No. 2 corn, you don't get it. That doesn't apply any more to one market than the other. We have our grades and standards, but we deliver to the consumers that which they do not buy. There has never been called for

I believe that, inasmuch as every department is under a different head, and, inasmuch as all those different heads have been brought together and we have accomplished the result of having uniform rules all over this country in the last two or three years, that we have accomplished a whole lot, but we have not accomplished and, in fact, we can not accomplish until all those different heads are under one head, and as long as you have different departments, some under the State, some under the Board of Trade, and some under this and that and what not, so long you will have differences in grade, you will have some following one idea, and some another, and the result will be chaos in your grades and the same sort of dispute every time you come together for these annual meetings. Now as we stand with our different department it seems to me that if we make our changes too radical we are going to bring about more confusion than we have now.

Mr. Cofer: It is my great pleasure to represent the city of Norfolk. I want to go further and say that it is with great pleasure today to say that I am specifically delegated by the Virginia and North Carolina Dealers' Association to handle this matter as I deem best, and as conditions may arise. It is also my pleasure to be a director in the two organizations to which I have just referred. These matters have been thoroughly discussed from time to time. I want to say further that I was also at the Washington meeting referred to in March; the resolution was read a few minutes ago; I signed the paper along with every other gentleman who was present at that time. It was my understanding, however, that we were to get together at a later date to discuss these matters and to give our ideas for what they were worth.

Now, our little market down by the sea may not amount to very much, but at the same time, we have, perhaps, done more kicking in the past than a good many markets very much larger. I want to say right here, gentlemen, that we are chronic kickers, but it was not because we wanted to kick, only because we were forced to kick, and could not help it. Now, gentlemen, we have five representatives here from our little market; we don't claim to know very much about grain down there, but we know a little about it, and we know that we don't handle the stuff by sample but by coming in personal contact with it. Now, I think Dr. Duvel wants all the suggestions we can give him. With that in view, we have a few suggestions to make and which we think important, two of which have not been touched upon yet. Now, I am frank to say that we think that Dr. Duvel's percentages of moisture are correct; but I am willing to go further, that by way of compromise we are willing to concede 15 per cent in No. 2 corn and 18 per cent in No. 3 corn, and that is what we asked for last year, gentlemen, in the Norfolk Convention. We did this, however, by way of compromise, you might call it, because we feel that the rules as here presented by Dr. Duvel, notwithstanding his magnificent work, we feel that the percentage of cob rotten and dirt are too great.



THE PHILADELPHIA DELEGATION
Who Offered a Substitute Schedule for the Corn Grades.

the Board of Trade, and Mr. Gibbs of Texas, formulated that resolution. Mr. Merrill was on it. That is all I want to say. I stated a while ago that I objected to the standard established by Dr. Duvel, but this conference had escaped my mind, and I want to state now, Dr. Duvel, that I want to withdraw those objections, because we in Texas believe in doing what we say—we will do it if it takes all the skin off; and, for that reason, Mr. Chairman, I ask to make this explanation, and I apologize to this Convention, and to you, Dr. Duvel, for my objecting to the grades, because we ought to do what we say we will do, if it takes all the skin off. As Mr. Merrill says, we want to do what we say we will do, and not try to whip the devil around the stump.

Martin Bullitt: I came here expecting to endorse those rules, and I do endorse them. I am perfectly willing to accept them; but we are business men, we are not children, we are not here to wash any dirty linen or have any disputes, and I say that if it will produce harmony and a standard set of rules and grades, that I, for one, do tentatively say that I am not going back on my endorsement that was read to you on that resolution, when I say that I am willing to endorse Mr. Merrill and those other gentlemen.

Lee G. Metcalf: I did not expect to say anything until reference was made in connection with the people who signed that petition. I signed it. I think that Dr. Duvel will agree with me that these trade rules are entered into subject to change. I wish to say that I signed that petition at Washington. I did it with the matter in view that we would be consulted, and we were told at that time that the grain interests would be consulted before these grades were finally adopted. I want to state that I agree with the people whom I represent.

Mr. Feltman: I am probably going to repeat what Mr. Metcalf has said, but I feel it my duty to repeat what he has said. I signed that resolution in Washington, in behalf of the Peoria Board of Trade; I signed it in good faith, and I was authorized by the Peoria Board of Trade to sign it in good faith, and I do not consider that we are joining, practically joining, in the resolutions offered by Mr. Merrill as violating those resolutions, because we have been asked to come here and give our opinions, and, as Mr. Metcalf stated, we were told that we would be given a chance to be heard before any rules were finally adopted. In regard to this conference, I think more of Dr. Duvel for this conference—I think he shows his broadmindedness and fairness in asking the opinion of the men who have been in the grain business for fifty years, and who conscientiously worked to establish the grades we have now. The Peoria Board of Trade, as evidence of its good faith with the Secretary of Agriculture at the meeting in Washington, immediately on my return to Peoria, instituted the system of giving every sample of corn a moisture test and grading it according to the moisture contained.

Mr. Crowell: I regret very much that I cannot agree with the position taken by Mr. Merrill. I don't claim to represent the official party of the Kansas City Board of Trade, but as the former president of that organization, time and time again, I have gone to Washington in order to prevent legislation affecting, as I thought, injuriously, the grain interests of this country. It is just

Federal legislation upon any economic question except it was due to the fact of abuse, and it resulted in the establishment of the Interstate Commission; it resulted in the establishment of meat inspection, and just as sure as there is a Heaven there is going to come Federal inspection, unless the grain exchanges of this country change their crop—I hope that the grain men assembled here will not be too timid or too dishonorable not to meet the Government fairly—and that is what you are attempting to do today when you fail to meet the absolute testimony that has been given here regarding the qualities of corn.

Mr. Aylesworth: Mr. Crowell is not here officially representing the Kansas City Board. I am. I am sent down here, not with specific instructions of what we



DR. J. W. T. DUVEL, TECHNOLOGIST FOR THE U. S. DEPARTMENT OF AGRICULTURE, AND HIS
STAFF OF ASSISTANTS

stand for, but further, to tell you that we stand for what is right, and I believe we have always stood for that, and I believe that we will always. I think that Dr. Duvel will bear me out and Mr. Marsh, who is his representative in Kansas City, will also bear me out, that we, in establishing an inspection department in Kansas City, have worked as closely as we possibly could with the Department of Agriculture, and that we are working along the lines of bringing about standardization and uniform rules that stand there now. I believe that we, as the Board of Trade, were represented in the meeting at Washington, and that we signed that petition, and we are ready to stand by it to this extent, we are invited here, as I understand it, to offer any suggestions that we might have to make, to assist Dr. Duvel in establishing these grades.

We believe it is better to get less dirt than cob rotten. We believe a higher per cent of moisture and less dirt and cob-rot is far safer to handle corn. Therefore, I say that we feel that No. 2 corn can stand at 16 per cent, and No. 3 corn at 18 per cent, and we also feel that No. 2 corn should be 16 per cent.

Now, gentlemen, when you come to the last column in the Government's grades, here is one matter which I think perhaps we have not given very serious consideration: It is our opinion that the fourth column should be entirely eliminated or should be applicable to kiln-dried corn only. Now, our reasons for that is, this, we don't believe that No. 2 with 16 per cent, or No. 3 corn, with 18 per cent, will ever break to any extent in actual handling. Therefore, gentlemen, it leaves a wide gate there for putting something in which might come from

kiln-dried corn, by reason of handling it. Now, we are here, gentlemen, to talk plain facts, we want to get at the bottom of it in fixing it, and doing it in the best possible way, and we feel while this last column applies to kiln-dried corn, that the per cent is too great—that 2 per cent is sufficient. And the last column we would reduce to 3 per cent instead of 4 per cent.

Bert Boyd: I represented the Indianapolis Board of Trade in the meeting in Washington referred to by the gentleman of the South; I signed the articles proposed there, and our Board still stands ready to back up our position; I don't feel that there is any repudiation on our part merely because we cannot agree at this time with some of the gentlemen from the South as to what standards should be adopted. Our Board's principal objection to these grades is the changing of the commercial grading of corn from No. 3 to that of No. 4. Our Board approves of all the grades suggested, with the exception of the grades numbered 2, 3 and 4. Following the chart, as you see it, our Board proposes No. 2 corn 16.5; No. 3 corn, 18.5; No. 4 corn, 20.5. We understand from Dr. Duvel's invitation that we are asked to give suggestions, and that is our conclusion.

After a number of the gentlemen had been heard from on the subject, Dr. Duvel expressed himself as gratified at the opinions brought out. He would not personally recommend to the secretary of agriculture any changes in the proposed grades, he said, but would like to see the harmonizing of all the grain interests into the best possible plan for permanent grades.

On motion of W. T. Washer, the thanks of the delegates to the conference were extended to Dr. Duvel by rising vote, the session then adjourned.

Thursday Morning Session

A remarkably able address on the "Uniform Bill of Lading" was delivered by C. A. Magnuson of Minneapolis at the opening of the Thursday morning session. He pointed out that with the present bills of lading all the advantage lies with the carrier and there is not a particle of disposition to protect the shipper, consignee or banker. He also suggested several changes for the Uniform Bill of Lading Bill.

It was moved by Mr. Wilkinson that the Legislative Committee go to Washington free of instructions to handle the bill of lading matter on October 28th. This motion was passed. A brief report was then submitted by Secretary Courcier, showing the approximate receipts from memberships during the year, \$26,000, expenditures, \$23,000, leaving a balance in the treasury of \$3,000.

W. S. Washer, Chairman of the Booster Committee, submitted his annual report, announcing that A. F. Leonhardt had secured the most new members during the year. Mr. Leonhardt was presented with a prize consisting of a diamond scarf-pin, by President Jones.

S. W. Strong, secretary of the Illinois Grain Dealers' Association then read a very interesting paper on "The Real Relation Between the Shipper and the Carrier," which stated an optimistic view of the future relations between shipper and carrier.

Mr. Strong showed how dependent one upon the other, carrier and grain dealer were, and yet in the past this relationship had been ignored; by the carriers in their secret meetings and fixation of charges and making of rules without consulting with the shippers; by the shippers in their suspicion and distrust of the carriers, and their attempt to get service for less than it was worth. He showed how the strictest co-operation was necessary for the continued welfare and prosperity of both sides, and how easy it would be to accomplish this if both would adopt the policy of open dealing in all their acts.

The report of the Resolutions Committee was then read by its chairman, H. S. Grimes. The resolutions included thanks to all who took part in the program, to President Jones, to the ladies of New Orleans, to the various committees and to Secretary John F. Courcier. Another resolution advocated the passage of the Randall-Humphreys Bill for Reclamation Purposes. Spirited discussion took place on the following resolution which was, however, finally adopted:

Whereas, this association has taken broad and comprehensive ground on the question of federal inspection of grain and on the question of standardization of grain and supervision thereof, therefore

Be it resolved, that this association now reaffirms its position adopted at Norfolk in 1912 convention and the same is hereby substituted for the resolution now pending, and further request is hereby made that

the government be requested to pass such laws as will give us immediate supervision as soon as government standards for corn are adopted.

In the Merrill resolution presented in J. C. F. Merrill's speech on Wednesday a change was made, to make the resolution close as follows:

Absolute, exclusive of mahogany corn, from the grades following the grade of Number 2 corn. That it is the object of this convention that mahogany corn be admitted to the grades as follows: No. 3, 1 per cent; No. 4, 2 per cent; No. 5, 3 per cent. Otherwise the percentages proposed by the department be agreed to.

ELECTION OF OFFICERS

The report of the Nomination Committee was then presented by its chairman, E. M. Wayne, the following officers being named:

PRESIDENT—Charles D. Jones, Nashville, Tenn.

FIRST VICE-PRESIDENT—Lee G. Metcalf, Illiopolis, Ill.

SECOND VICE-PRESIDENT—John Messmore, St. Louis, Mo.

DIRECTORS—C. A. Magnuson, Minneapolis; A. F. Leonhardt, New Orleans; C. W. Lonsdale, Kansas City, Mo.; J. L. King, Philadelphia; L. W. Forbell, New York City; W. M. Bell, Milwaukee; Harry H. Bingham, Louisville, Ky.; E. P. Peck, Omaha, Neb.

The report of the Nomination Committee was upon motion received, and the officers declared duly elected. Following the election the convention adjourned *sine die*.

Convention Notes

L. W. Forbell with Chief Inspector White represented the New York City market.

Some of Omaha's best grain men came: J. W. Holmquist, F. S. Cowgill, E. P. Peck, E. A. Beardsley.

C. H. Feltman, C. C. Miles, W. T. Cornelison and Chief Inspector F. B. Tompkins attended from Peoria.

Tom Morrison said the New Orleans Mint was really the only thing he ever saw that had it all over the grain business.

The Buffalo market was represented by Fred E. Pond, secretary of the Corn Exchange, and Alfred Anderson, chief grain inspector.

Cincinnati delegates: B. H. Wess, F. F. Collins, Joe Heurman, W. H. Kramer, Ed. Piney, W. C. Culkins, Geo. F. Munson, D. B. Granger.

From Philadelphia: Frank E. Marshall, Wm. M. Richardson, Walter K. Woolman, W. W. Walton, S. L. Tomlinson, Wm. P. Brazer, J. L. King.

"Which is the bigger," said Mr. Foss of Chicago to Mr. Dorsey of Texas, "Texas or the United States?" "Texas," replied Mr. Dorsey promptly.

The Louisville market sent: R. L. Callahan, A. Brandeis, H. H. Bingham, T. G. Williams, John McDonald, Arthur Schuff, John Raigdt, W. A. Thompson.

To represent Toledo, the world's seed market, there were E. L. Southworth, Fred Mayer, Jesse W. Young, Chief Grain Inspector E. H. Culver, C. H. Breyman.

Every grain dealer may be expected to take up the language of French immediately, looking to some future New Orleans meeting. It took a hero to order oysters "en brochette" and then show no surprise when the waiter brought 'em.

Steve McTiernan, representative of the Huntley Manufacturing Company of Silver Creek, N. Y., doesn't need any "added appendages" to make him welcome, but he had for his friends a silver lead pencil with extra leads, handsomely jeweled.

H. A. Rumsey of Chicago appeared to be a very dangerous man at the Grunewald one afternoon, flourishing a long and dangerous looking stalk of sugar cane. It turned out to have come from the 100,000-acre plantation in Louisiana of Charles Buckley, the oat king of Chicago.

H. H. Newell of the Rogers Grain Company, Chicago, was a guest, with a number of his friends on Monday evening, of A. F. Leonhardt at a dinner at Madam Maylie's of Maylie & Esporte. Madam Maylie is only 107 years of age, but sprightly as a girl

in her 'teens, and her cooking need only to be seen to be appreciated. At least that's what Mr. Newell says and he conversed with Madam in her own language.

The famous qualities of Milwaukee were maintained by delegates W. M. Bell, H. M. Stratton, Charles A. Krause and Chief Inspector A. A. Breed.

A very large number of St. Louis merchants arrived early. They were John Messmore, Charles F. Beardsley, Geo. F. Powell, E. M. Flesh, Roger P. Annan, Jr., John Mullally, Jr., Dan Mullally, Wilbur Christenson, E. C. Robinson, Chief Weighmaster John Dower, Fred Langenberg, George Harsh, Wm. Connor and Trave Elmore.

The opinion of Leslie F. Gates, one of the heads of Lamson Bros. & Co. of Chicago, is very highly regarded when he expresses himself on the middle west corn situation. Some of his fellow voyagers from Chicago claim that he made the statement while looking from his car window enroute to the meeting, that the sugar cane did not appear to be earing out well in the southern sections.

The visiting delegates and guests of the association were extended the privileges of the following organizations, clubs and play houses: New Orleans Board of Trade; New Orleans Cotton Exchange; New Orleans Association of Commerce; Young Men's Gymnastic Club; New Orleans Chess, Checkers and Whist Club; Southern Yacht Club; Lafayette Theater, and the Hippodrome Theater.

L. M. Smith of the Seed Trade Reporting Bureau of Chicago showed opposite convention hall a four-burner official Brown-Duvel Moisture Tester with automatic oil measure and grain refractor. He also had on exhibition a moisture tester with electrical equipment for testing the flasks and a four-in-one scale which gives the weight for moisture test, the test weight per bushel, the dockage, percentages, and which weighs in ounces for mailing samples, etc.

Evidently proceeding on the theory that "a little knowledge is a dangerous thing," Fred Mayer of J. F. Zahm & Co., Toledo, Ohio, distributed a small booklet bearing the alluring title "What we know about the price of grain and seeds during the next six months." Those who opened the book, to find the leaves blank, felt like the old darky who, after firing upon a lot of decoys and discovering they were not ducks, exclaimed: "Well, if that ain't just scan'lous."

Secretary Courcier said that one nurse informed him that the new baby at his house was the prettiest she had ever seen in an experience of twenty-two years; another nurse claimed that it had the most wonderful eyes she had ever before noticed; a near neighbor and woman of unquestioned veracity and reputation related broadly that the baby was the very image of its father. So what's the use. It's the safest kind of a wager, we believe, that the name of the new baby will be John F. Courcier, Jr.

The Chicago grain men stopped off enroute at Memphis where they were the guests on Monday of the Memphis Merchants' Exchange. They were driven at first to the Exchange where they were welcomed by the president of that body, after which a dinner was served, followed by a ride about the city. The guests included: Edward Andrew, president of the Chicago Board of Trade; Secretary J. C. F. Merrill, Chief Weighmaster H. A. Foss, J. W. Radford, Wm. H. Noyes, J. J. Stream, Frank B. Rice, H. A. Rumsey, E. D. McDougal, W. J. Byrnes, Albert J. Smith, W. E. Hudson, H. H. Newell, H. M. Lindsay, Geo. E. Booth, Leslie F. Gates, E. F. Thompson, F. B. Gallagher, Henry Stanberry and Lowell Hoyt.

Dr. J. W. T. Duvel included in his staff: E. G. Boerner, Washington, D. C.; E. L. Morris, Kansas City, Mo.; W. P. Carroll, Chicago, Ill.; L. M. Jeffers, Baltimore, Md.; C. A. Russell, Decatur, Ill.; Phillip Rothrock, New Orleans. The government's exhibit displayed by these gentlemen in a room adjoining the convention hall was most interesting. It included their newly designed moisture tester with automatic cut-off so that the operator, after starting the test, could leave the machine so set that it ceased operating after the test was completed. There

was also shown, side by side, the water and dry matter represented in one bushel of corn from No. 1 and No. 6 grade. An especial feature was a system of charts giving a summary of six years of work in the department in studying corn and arriving at the basis for the grades. A number of charts also showed a summary of the work from investigation of export loads of corn from various markets. This latter work started about three years ago.

PROGRAM OF ENTERTAINMENT

The three hundred delegates and ladies numbering about one hundred and fifteen, were royally entertained by the local committee during their stay in New Orleans. On October 14, from 2 p. m. to 4 p. m., an informal reception was given for the visiting ladies in the Gold Room of the Grunewald Hotel. The guests were welcomed by Mrs. E. Nathan and Mrs. W. L. Richeson of New Orleans and Mrs. W. E. Sheldon of Jackson, Mich., president of the Ladies' Auxilliary of the Grain Dealers' National Association. A musical program was given by the Lawrence Trio and a group of well known artists of New Orleans. An automobile trip was also tendered to the ladies at 1:30 p. m. on October 15. A luncheon was served at the Country Club, following which they were taken along some of the residence streets and through the handsome parks for which the city of New Orleans is famous.

The gentlemen enjoyed relaxation from a strenuous day at 8 p. m., October 15, at a smoker given at the Board of Trade. A vaudeville show of unusual merit was a feature of the evening and the coast and shores of the Gulf had been ransacked to provide a tempting and appetizing luncheon served at 10 o'clock. Speakers of the evening were A. F. Leonhardt, Mayor Behrman and Ex-Governor J. Y. Saunders. E. M. Wild very graciously performed the difficult duty of toastmaster. A theater party was given for the ladies on the same evening.

A harbor trip for both ladies and gentlemen was the plan of the committee for the final afternoon of the meeting. The boat was taken at 12:30 p. m. and luncheon was served on board. The entire afternoon being spent on board the boat. The return to the city was made at a sufficiently early hour for dealers who desired to take the early evening trains north.

THE LADY VISITORS

Among the wives, daughters and friends of grain men at New Orleans were Mrs. Chas. Ashpaugh, Frankfort, Ind.; Mrs. Bert A. Boyd, Indianapolis, Ind.; Mrs. Rufus Bullard, Maxwell, Iowa; Mrs. E. C. Breyfogle, Mt. Sterling, O.; Mrs. W. M. Bell, Milwaukee, Wis.; Mrs. E. A. Beardsley, Omaha, Neb.; Mrs. A. F. Alexander, Nashville, Tenn.; Mrs. Charles Dudley Jones, Nashville, Tenn.; Mrs. G. F. Birdsong, Norfolk, Va.; Mrs. J. H. Brandt, Portsmouth, Va.; Mrs. E. H. Birchfield, Roanoke, Va.; Mrs. Chas. H. Breyman, Toledo, Ohio; Mrs. L. A. Pugh, Toledo, Ohio; Mrs. H. G. DeHing, Toledo, Ohio; Mrs. W. J. Garner, Louisiana, Mo.; Mrs. H. E. O'Bryan, Owensboro, Ky.; Margaret Garner, Louisiana, Mo.; Mrs. A. W. Clark, Cleveland, Ohio; Mrs. E. T. Custerbender, Sidney, Ohio; Mrs. J. W. Channel, Melvin, Ohio; Mrs. R. G. Calvert, Selma, Ohio; Mrs. J. F. Carlton, Memphis, Tenn.; Mrs. E. H. Culver, Toledo, Ohio; Stella E. Culver, Toledo, Ohio; Nellie L. Culver, Toledo, Ohio; Mrs. Seth Catlin, Boston, Mass.; Mrs. W. C. Culkins, Cincinnati, Ohio; Mrs. W. M. Cosby, Birmingham, Ala.; Mrs. V. Deenein, Warrensburg, Ill.; Mrs. T. L. Davis, Memphis, Tenn.; Mrs. E. J. Domergin, Covington, La.; Mrs. Jule G. Smith, Fort Worth, Tex.; Mrs. Bert K. Smith, Fort Worth, Tex.; Mrs. C. H. Elliott, Waterville, N. H.; Mrs. C. H. Ellis, New Orleans, La.; Mrs. N. C. Ernst, New Orleans, La.; Mrs. J. D. Eddy, New Orleans, La.; Mrs. C. H. Feltman, Peoria, Ill.; Mrs. H. A. Foss, Chicago, Ill.; Mrs. C. E. Fettis, New Orleans, La.; Mrs. Harry S. Grimes, Portsmouth, Ohio; Mrs. N. J. Gill, Montgomery, Ala.; Mrs. Boyd P. Hill, Freeport, Ill.; Mrs. Robert Harper, Des Moines, Iowa; Mrs. Geo. B. Harrison, New Orleans, La.; Miss Vland Harrison, New Orleans, La.; Mrs. W. H. Hendren, New Orleans, La.; Mrs. Dr. Holloway, New Orleans, La.; Mrs. Olmick Hennig, New Orleans, La.; Mrs. Elmer Hutchinson, Arlington, Ind.; Mrs. J. Heuerman, Cincinnati, Ohio; Mrs. R. M. Hobbie, Montgomery, Ala.; Mrs. Willis Jones, Mt. Sterling, Ohio; Mrs. Frank C. Johnson, Memphis, Tenn.; Mrs. Wm. Kramer, Cincinnati, Ohio; Mrs. F. Leonhardt, New Orleans, La.; Mrs. J. E. Lease, West Manchester, Calif.; Mrs. Ed. Lee, El Reno, Okla.; Mrs. Lee Metcalf, Illinois, Ill.; Mrs. Geo. B. Matthews, New Orleans, La.; Charlotte Merrill, Hinsdale, Ill.; Leora Morrison, Frankfort, Ind.; Mrs. Geo. F. Munson, Cincinnati, Ohio; Mrs. Fred Moyer, Toledo, Ohio; Mrs. W. E. Matthews, Montgomery, Ala.; Mrs. J. W. McCord, Columbus, Ohio; Mrs. C. J. McCotter, Indianapolis, Ind.; Mrs. Paul Dunbar, Augusta, Ga.; Mrs. Harold C. Eve, Augusta, Ga.; Mrs. Edward Nathan, New Orleans, La.; Mrs. Thomas M. Newbill, Nashville, Tenn.; Mrs. Wm. Nading, Shelbyville, Ind.; Mrs. E. W. Phares, Tipton, Ind.; Mrs. Ed. P. Pick, Omaha, Neb.; Mrs. G. A. Payne, Columbus, Ohio; Mrs. Linda M. Peine, Oldenberg, Ind.; Miss Marina Peine, Oldenberg, Ind.; Miss E. J. Rowe, Verona, Ohio; Mrs. W. M. Randels, Enid, Okla.; Mrs. Chas. M. Rodd, New Orleans, La.; Mrs. E. C. Eikenberry, Camden, Ohio; Mrs. F. B. Rice, Chicago, Ill.; Mrs. Chas. Rockwell, Mt. Vernon, N. Y.; Mrs. W. Lyle Richeson, New Orleans, La.; Mrs. Willis E. Sheldon, Jackson, Mich.; Mrs. W. H. Sutherland, Cairo, Ill.; Mrs. G. S. Siddons, St. Louis, Mo.; Mrs. T. Skinner, New Orleans, La.; Mrs. J. W. Simmons, Pemberton, Ohio; Mrs. S. W. Strong, Urbana, Ill.; Mrs. H. S. Smith, Selma, Ohio; Mrs. J. C. Strong, Oak Park, Ill.;

Mrs. F. O. Stanley, Lyons Sta., Ind.; Mrs. D. E. Studebaker, Bluffton, Ind.; Mrs. H. K. Schafer, El Reno, Okla.; Miss Mae Smith, Chicago, Ill.; Mrs. Harry E. Taylor, Portsmouth, Ohio; Mrs. J. E. Werts, Verona, Ohio; Mrs. Wade Wood, Birmingham, Ala.; Mrs. J. A. Washburn, Remington, Ind.; Miss Gertrude Wess, St. Bernard, Ohio.

THE ATTENDANCE

Aside from those mentioned in "Convention Notes" the following delegates and visitors were registered: Dan Joseph, Dan Joseph Co., Columbus, Ga.; I. N. Birch, Juliette Milling Co., Macon, Ga.; Thos. C. Lutz, N. C. & St. L. Ry., St. Louis, Mo.; Jas. F. Carlton, A. B. & A. R. R., Memphis, Tenn.; Geo. S. Siddons, A. B. & A. R. R., St. Louis, Mo.; R. P. Goudy, Citizens' Mill & E. Co., Weatherford, Okla.; F. C. Johnson, Rock Island Lines, Memphis, Tenn.; Thos. Newbill, Cornelius Newbill & Co., Nashville, Tenn.; M. S. V. Linard, Nashville, Tenn.; C. R. Staue, C. B. Ry., New Orleans; Chas. Quinn, Grain Dealers' National Association, Toledo, Ohio; O. C. Turlington, Rock Island Lines, New Orleans; S. T. Pease and wife, Pease & Dwyer Co., Memphis, Tenn.; A. P. Smirl, Texas & Pacific Railway, St. Louis, Mo.; S. M. Bray, Union Elevator Co., Cleveland, Ohio; H. Bechtel and wife, Texas & Pacific Railway, New Orleans; C. A. Johnson, E. W. Wagner & Co., New Orleans; N. S. Washer, S. R. Washer Grain Co., Atchison, Kan.; A. F. Leonhardt, A. Leonhardt & Co., New Orleans; E. Nathan, Nathan & Fettis, New Orleans; C. C. Cloutman, S. R. Washer Grain Co., Atchison, Kan.; James M. Rogers, M. A. Rogers & Co., New Orleans; R. W. Hale, J. R. Hale & Sons, Nashville, Tenn.; J. S. Dewey, The Dewey Bros. Co., Blanche, Ohio; Jas. H. Warren, Baltimore Chamber of Commerce, Baltimore, Md.; F. E. Gillette, Jr., the Gillette Grain Co., Nashville, Tenn.; Chas. M. Rodd, New Orleans; A. R. Peirson, Peirson-Lathrop Grain Co., Kansas City, Mo.; P. D. Werts, Werts, Brown & Rowe, Verona, Ohio; J. Rowe, Werts, Brown & Rowe, Verona, Ohio.

Dr. J. W. T. Duvel, U. S. Dept. of Agriculture, Washington; E. C. Crossman, Quinn-Shepherdson Co., Minneapolis, Minn.; J. A. Jones, J. A. & Co., Jones M. & E. Co., Nashville, Tenn.; Sam D. Thomas, chief grain inspector, Baltimore, Md.; E. Wilkinson, Western Grain Co., Birmingham, Ala.; Wade Wood, Wood & Crabbe Grain Co., Birmingham, Ala.; L. N. Jeffers, U. S. Dept. of Agriculture, Baltimore, Md.; J. H. Cofer, J. H. Cofer & Co., Norfolk, Va.; C. S. Leach, Jr., Langenberg Hay & Grain Co., New Orleans; W. F. Brown, Shellrock Mfg. & Gr. Co., Shellrock, Iowa; S. C. Wilkes, S. C. Wilkes & Co., Nashville, Tenn.; A. F. McAlexander, J. H. Wilkes & Co., Nashville, Tenn.; A. W. Clarke, Cleveland, Ohio; H. I. Baldwin, H. I. Baldwin & Co., Decatur, Ill.; C. B. Fox, New Orleans; Harry A. Willmer, New Orleans.

E. M. Wayne, Wayne Bros. Grain Co., Delavan, Ill.; E. V. Phillips, Hall-Baker Grain Co., New Orleans; J. Carver Strong, National Hay & Grain Reporter, Chicago; Thad J. Clark, New Orleans; Eugene T. Barry, E. T. Barry & Co., New Orleans; Willis Jones, Jones & Jones, Mount Sterling, Ohio; E. C. Breyfogle, Mount Sterling, Ohio; Geo. Harsh, Geo. Harsh & Co., St. Louis, Mo.; Alex. C. Harsh, Alex. C. Harsh & Co., Nashville, Tenn.; Chas. D. Jones, Chas. D. Jones & Co., Nashville, Tenn.; L. W. Gifford, Cedar Rapids Grain Co., Cedar Rapids, Iowa; Charles R. Mathews, New Orleans; P. R. Holman, A. F. Leonhardt & Co., New Orleans; Arthur W. Graton, G. D. N. A., Toledo, Ohio; H. W. Danforth, president Illinois Farmers' Grain Assn., Washington, Ill.; E. B. Louis, Nashville, Tenn.; E. H. McGavock, J. R. Hale & Son, Nashville, Tenn.; C. M. Bullitt, Henderson Elevator Co., Henderson, Ky.; John S. McDonald, New Albany, Ind.; Fred E. Pond, secretary Corn Exchange, Buffalo, N. Y.; J. L. Doering, Peoples' Elevator Co., Antwerp, Ohio; James F. Buckner, Jr., superintendent Board of Trade, Louisville, Ky.; Jno. W. Daidt, F. Daidt Mfg. Co., Louisville, Ky.; Jno. E. Bacon, American Elevator and Grain Trade, Chicago, Ill.; Thos. L. Davis, Davis & Andrews Co., Memphis, Tenn.; W. A. Wenholtz, Cicero, Ill.; J. P. Roberts, chief grain inspector, Nashville, Tenn.; C. A. Anderson, U. S. Dept. of Agriculture, New Orleans; Chas. A. Ashpaugh, Frankfort, Ind.; J. Ralph Pickell, National Hay & Grain Reporter, Chicago, Ill.; T. A. Morrisson, Morrisson-Thompson Co., Frankfort, Ind.

A. E. Reynolds, Crabbs-Reynolds-Taylor Co., Crawfordsville, Ind.; E. T. Custerbender, E. T. Custerbender & Co., Sidney, Ohio; G. A. Payne, Scott & Woodrow Co., Columbus, Ohio; Wm. Copeland Furber, guest, Philadelphia, Pa.; A. G. Rudolph, American Elevator and Grain Trade, Chicago, Ill.; E. C. Eikenberry, Payne & Eikenberry Co., Camden, Ohio; H. F. Hanks, U. S. Dept. of Agriculture, New Orleans; Ray L. Depew, M. & O. Ry., St. Louis, Mo.; E. A. Bynum, M. & O. Ry., New Orleans; Jule G. Smith, Fort Worth Elevator Co., Fort Worth, Tex.; Bert K. Smith, Smith Bros. Grain Co., Fort Worth, Tex.; S. D. Scott, S. D. Scott & Co., Inc., Norfolk, Va.; W. E. Cook, C. & O. Ry., Norfolk, Va.; Lee G. Metcalf, Illinois, Ill.

Bennett Taylor, Crabbs-Reynolds-Taylor Co., La Fayette, Ind.; James W. Sale, Studabaker Gr. & Sd. Co., Bluffton, Ind.; Matthews D. Benzauin, Boston, Mass.; S. C. Black, S. C. Black Co., Mobile, Ala.; T. M. Buckridge, manager Brock Gr. Co., Brock, Neb.; J. D. Domergue, Slidell Gro. & Gr. Co., Slidell, La.; E. L. Morris, U. S. Dept. of Agriculture, Kansas City, Mo.; H. S. Grimes, Grimes-Strittmatter Gr. Co., Portsmouth, Ohio; W. J. Garner, Anderson-Garner Co., Louisiana, Mo.; Frank E. Humphreys, Lawton Mill & Elevator Co., Lawton, Okla.; W. W. Deck, Citizens Mill Co., Weatherford, Okla.; Jno. B. Van Wagner, London, Ohio; S. W. Strong, secretary Illinois Grain Dealers' Ass'n, Urbana, Ill.; B. P. Hill, B. P. Hill Gr. Co., Freeport, Ill.; V. L. Cofer, Norfolk, Va.; H. E. Boney, Boney & Harper Mfg. Co., Wilmington, N. C.; W. M. Randels, Randels & Grubb, Enid, Okla.; Eugene V. Brown, Mobile, Ala.; Geo. W. Cole, Bushnell, Ill.; J. W. Chandra, McElvira, Ohio; Seth Catlin, chief grain inspector, Boston, Mass.; Wm. C. Lertz, Mobile, Ala.; J. W. Woolfy, Mobile, Ala.; R. W. Harper, Harper & Ward, Des Moines, Iowa; G. F. Birdson, City Hay & Gr. Co., Norfolk, Va.; G. H. K. White, chief grain inspector, New York, N. Y.; Rufus Bullard, Maxwell, Iowa; H. S. Herring, secretary Board of Trade, New Orleans; Charles Rockwell, Charles Rockwell & Co., Mount Vernon, N. Y.; W. C. Hill, Birmingham, Ala.; W. M. Cosby, W. M. Cosby & Flint Gr. Co., Birmingham, Ala.; W. E. Sheldon, Willis E. Sheldon, Jackson, Mich.; J. E. Heniken, chief grain inspector, Cleveland, Ohio; Wilton Sturges, Sturges & Wood, Meridian, Miss.

Capt. Jno. Foering, chief grain inspector, Philadelphia, Pa.; M. C. Fears, chief grain inspector, Kansas City; J. T. Gibbons, Jr., New Orleans; Fred W. Schreiber, Henry B. Schreiber & Bro., New Orleans; J. S. Watterman, J. S. Watterman & Co., New Orleans; H. H. Wayland, Hammond, La.; H. W. Benedict, Benedict Com. Co., New Orleans; A. R. Ware, Kansas City, Mo.; W. Round, Avery Scale Co., Milwaukee, Wis.; R. C. Jordan, New Orleans; Louis Levy, Louis Levy Gro. Co., Baton Rouge, La. Geo. Aylsworth, Aylsworth-Neal-Tomlin Gr. Co., Kansas City; R. G. Calvert, Selma, Ohio; M. S. Beals, St. Louis, Mo.; H. S. Smith, Selma, Ohio; H. E. O'Bryan, Owensboro, Ky.; R. J. Barr, Steinhardt &

Co., New Orleans, La.; J. H. Adams, Coop. Mngr. & Fmr., Minneapolis, Minn.; E. H. Meadows, Jr., Newbern, N. C.; Geo. A. Wells, Des Moines, Iowa; W. H. Brill, Illinois Central R. R., New Orleans; Alfred L. Phillips, Phillips-Patterson Co., Richmond, Va.; Jos. V. Ferguson, New Orleans; E. W. Phares, Tipton, Ind.; J. W. Strong, New Orleans; Jno. C. McHugh, secretary Chamber of Commerce, Minneapolis, Minn.; C. A. Magnuson, Minneapolis, Minn.; A. G. Harvey, McGinnis & Woods, Meridian, Miss.; W. W. Early, Sealey-Early Gr. Co., Waco, Tex.; O. A. Talbot, Keokuk, Iowa; James McCarthy, McCarthy & Moore Bros., Carthage, Ill.; Wm. Moore, McCarthy & Moore Bros., Carthage, Ill.; F. L. Moore, McCarthy & Moore Bros., Carthage, Ill.; W. L. Richeson, chief weighmaster, New Orleans; A. C. Carpenter, New Orleans; Walter McPedy, Wichita Ml. & Elevator Co., Wichita Falls, Tex.; G. R. Magruder, New Orleans; W. P. Carroll, U. S. Dept. of Agriculture, Chicago, Ill.; C. H. Williams, G. & S. I. R. R., Jackson, Miss.; J. R. Bonds, grain inspector, Norfolk, Va.; H. P. Moller, Des Moines Elevator Co., Des Moines, Iowa; T. K. Mull, Manila, Ind.; H. G. Wolf, Morristown, Ind.; J. W. Simmons, Pemberton, Ohio; S. E. Rleson, Memphis, Tenn.; E. R. Gardner, chief inspector, Memphis, Tenn.; J. C. Ryan, N. C. & St. L. Ry., Memphis, Tenn.; C. G. Robinson, Scruggs-Robinson Co., Memphis, Tenn.; Y. S. Biermann, L. & N. R. R., New Orleans; C. E. Riley, Indianapolis, Ind.; Bert A. Boyd, Indianapolis, Ind.; L. P. Cook, Memphis, Tenn.; J. S. Denyven, Memphis, Tenn.; F. G. Crowell, Hall-Baker Gr. Co., Kansas City, Mo.; J. W. Fulghum, Shanks-Phillips Co., Memphis, Tenn.; A. A. Reinhardt, T. St. L. & W. R. R., New Orleans; C. R. Stairs, Colo. & So. Ry., New Orleans; T. B. Ritchie, Nunane, Ga.; H. W. Fisher, New Orleans; J. B. Felt, Meridian, Miss.; J. J. McCarty, A. B. & A. R. Ry., New Orleans; J. H. Branch, Portsmouth, Va.; L. A. Pugh, Hicksville, Ohio; H. G. Dearing, Curtis, Ohio; J. G. Garnet, Bainbridge, Ga.; F. E. Elchler, Modern Miller, St. Louis, Mo.; A. E. Lovejoy, Deposit, N. Y.; E. H. Kimbrough, Mobile, Ala.; Jno. H. Ipschupp, chief grain inspector, Galveston, Tex.; G. B. Toole, Bainbridge, Ga.; H. C. Eve, Augusta, Ga.; Paul H. Dunbar, Augusta, Ga.; J. W. McCord, Columbus, Ohio; J. S. R. Williams, T. & P. Ry., New Orleans; C. E. Fettis, Nathan & Fettis, New Orleans; Jno. F. Courcier, secretary G. D. N. A., Toledo, Ohio; Jos. Gregg, Atlanta, Ga.; J. P. Sledge, Champaign, Ill.; W. H. Vansant, Clifton, Ill.

A. E. Rust, Halliday Elevator Co., Cairo, Ill.; J. E. Redus, Meridian, Miss.; J. B. Gillispie, Jr., Halliday Elevator Co., Cairo, Ill.; G. P. Eichenberger, Halliday Elevator Co., Cairo, Ill.; Ernest Wheeler, Halliday Elevator Co., Cairo, Ill.; T. W. Martin, Smith & Martin, Atlanta, Ga.; P. A. Methrin, Atlanta, Ga.; W. F. Powell, chief inspector, Cairo, Ill.; Jno. H. Morrow, Wash., Ind.; Geo. B. Ross, chief grain inspector, Topeka, Kan.; N. J. Grell, Montgomery, Ala.; Elmo Marsh, Pine Bluff, Ark.; Norman Drum, Montgomery, Ala.; S. V. E. Mathews, Jr., Montgomery, Ala.; R. M. Hobbie, Montgomery, Ala.; J. G. Walker, Montgomery, Ala.; W. D. Hannah, Jackson, Miss.; W. J. Crosswell, Atlanta, Ga.; W. H. Southerland, Cairo Mlg. Co., Memphis, Tenn.; Geo. F. Macgregor, Frisco Rd., Memphis, Tenn.; A. C. Carper, N. O. & M. R. R., Memphis, Tenn.; Geo. B. Mathews, New Orleans; D. W. Lackey, Knoxville, Tenn.; Victor Dewein, Warrensburg, Ill.; F. F. Collins, Cincinnati, Ohio; H. K. Schaffer, Canadian Mlg. and E. Co., El Reno, Okla.; Ed S. Levan, El Reno, Okla.; Victor G. Kropf, Chicago, Ill.; R. M. Millage, New Orleans, La.; J. C. Curry, Heiser, Ala.; W. Shipley, New Orleans; E. E. Oliver, So. Ry., Louisville, Ky.; J. S. Gave, Harry Bros. Co., New Orleans; B. H. West, Cincinnati, Ohio; W. H. Kramer, Cincinnati, Ohio; J. H. Trousdale, Monroe, La.; F. W. Birchett, Jr., C. & A. Ry., New Orleans; Sam Bingham, Bingham-Hewett Gr. Co., Louisville, Ky.; W. T. Helm, Hall-Baker Gr. Co., New Orleans.

CHIEF GRAIN INSPECTORS MEET

As has been the custom for some years past the Chief Grain Inspectors' National Association annual meeting followed immediately upon the close of the National Grain Dealers' Convention. The meeting was of more than usual interest, in view of the importance of the new grain grades.

A thorough discussion of wheat grades occupied much of the session and recommendations as to grades were referred to the Grain Dealers' National Association. The experience of the inspectors as revealed in these recommendations will no doubt be of the greatest service to the Grain Dealers' Association and to the Government experts in fixing the definite grades of wheat for the country, which will probably be done two years hence.

The Southwest representatives complained of the indefinite grading in kaffir and maize and asked for new grades on these important Southwest products. This request was granted by the association.

The election of officers brought no overwhelming surprises, as the services of those honored have long been recognized as deserving of the highest praise. The election resulted as follows: E. H. Culver of Toledo, Ohio, was chosen president for the seventh consecutive time, an indication of the esteem in which he is held by his confreres; Sam D. Thomas, of Baltimore, vice-president; and F. B. Tompkins, of Peoria, Ill., secretary.

The new members elected by the Association were John P. Gibbons, Chicago, Ill.; George B. Ross, Topeka, Kan., and J. P. Roberts, Nashville, Tenn.

Among those present, besides the ones already named, were Seth Catlin, Boston, Mass.; G. H. K. White, New York, N. Y.; J. E. Heniken, Cleveland, Ohio; M. C. Fears, Kansas City, Mo.; J. R. Bonds, Norfolk, Va.; E. R. Gardner, Memphis, Tenn., and W. F. Powell, Cairo, Ill.

ASSOCIATIONS

GOOD SPIRIT IN THE MIAMI VALLEY

The Miami Valley Grain Dealers' Association had a well attended and enthusiastic meeting at Dayton, Ohio, on September 26. About thirty-five elevators in the valley were represented and a great deal of spirit and interest was exhibited during the discussions. Several members signified their intention of being present at the national meeting in New Orleans.

Of course the chief subject of discussion was the proposed corn grades. Objection was made to them as No. 3 of the old grades will be changed to No. 4 under the new rules. This the dealers thought would cause considerable confusion which might be obviated easily by a slightly different scale. Supplemental to the main discussion, the question was raised as to the basis of settlement under the new rules when a shipper sends out a car of No. 4 corn on a sale of No. 3. It was also asked what would be the penalty for shipping off grade corn and who was to enforce it?

The election of officers for the ensuing year resulted in the re-election of the old staff: J. E. Wells, of Quincy, president; E. W. Cook, of Maplewood, vice-president; E. T. Custenborder, of Sydney, secretary, and J. W. Simmons, of Pemberton, treasurer.

KANSAS SCALE INSPECTION

M. H. Starr, scale inspector of the Kansas Grain Dealers' Association, recently submitted his report on the condition of scales examined in that state, and while a large proportion of those investigated proved to be in error, this cannot be construed as an indication that all the scales in the state are in the same proportion faulty, as only those scales were examined which were suspected as being wrong or which had not been examined last year or which were entirely out of commission.

A total of 428 scales were reported, of which 262 were four to six ton wagon scales. Of the inaccurate scales of this class 89.5 per cent were wood framed and of these 68.4 per cent were in error on account of some defect in wood construction. Of the dump scales every one in error was found to be weighing heavy, benefiting the seller in each case.

Of the hopper type those of from 30,000 to 70,000 pounds capacity showed the greatest number in error, 25.9 per cent. The principal defects being weak frames and unstable foundations. Scales located on work floors were more subject to error through collection of dirt under platform and insufficient strength of levers. Of the automatic scales over half were out of balance by the work box or showed factory defects.

It is pointed out in the report that while wagon scales of steel frame do not insure accuracy, nor do wooden frames mean poor weight, it is a safe conclusion that a steel construction standard scale is far superior to the same scale with wood construction.

NATIONAL HAY ASSOCIATION

A letter sent out to the members of the National Hay Association by Secretary J. Vining Taylor recently, contains much of importance not only to members of the Association, but to all grain and hay shippers and receivers. Mr. Taylor advises that the time of year has arrived when we begin to hear complaints from our members and others as to shortage of car supply. It may be interesting not only to the hay trade but to others to read the resolution adopted by the National Industrial Traffic League on May 24, 1913, as follows:

Whereas, there have been frequent periods when the available supply of empty cars has not been sufficient to meet the requirements of the commerce of the country; and

Whereas, there has been waste in the car supply, for which both carriers and shippers are responsible, by reason of failure to promptly repair bad order cars, delay in movement, unnecessary detention loading and unloading, holding undetained material which should be unloaded, failure to utilize available car space by loading as near carrying capacity as conditions permit, therefore, be it

Resolved, that it is the sense of this meeting that the duty rests upon carriers and shippers alike to make every effort to increase the efficiency of car supply by the elimination of such waste as they are responsible for; and, be it further:

Resolved, that the League continue its campaign, by circular or otherwise, as may be necessary to secure the maximum use of transportation facilities.

He also quotes from J. Kruttschmitt, president, American Railway Association, who said in part:

There can be no doubt as to the responsibility that is felt by railway managers with regard to furnishing an ample supply of cars to enable the great traffic of this continent to be satisfactorily moved. The mere multiplication of the car units will not accomplish this. It requires vigilant supervision to prevent unnecessary delay in handling so as to obtain the maximum number of car load movements in a given time. A car unnecessarily idle is a distinct economic loss. The proportion

of time when a freight car is idle awaiting either loading or unloading is necessarily large. The reduction of this time to a minimum is a consummation that all railway officials have earnestly sought to obtain.

It is therefore satisfactory to note that so many shippers have come to realize the enormous loss in the movement of traffic that is entailed in the aggregate by even slight unnecessary delay on their part, when multiplied by its effect upon the entire equipment, and are so heartily co-operating with our railways in endeavoring to correct the evil. Taking a broad view of the case, the best interests of both shippers and carriers in this matter, as in many others, are incidental, and by working harmoniously together, the successful operation of the business of the country will surely be largely conserved.

This is certainly a solution in part of the hardships that some shippers seem to think have been worked upon them. Business barometers point to heavy tonnage and freight car statistics to a net car shortage this fall, the largest, in fact, ever reported. Counting upon average weather, railroads and shippers will have to strain every effort for full use of existing equipment to avoid delays and losses. Taking the figures from the Railway Business Association Bulletin No. 14, issued September 2, 1913, we find the car supply record as follows:

Net surplus, Aug. 1, 1913.....	58,455
Average annual decrease from Aug. 1, 1908-12,	
to autumn low supply.....	150,400
Estimated autumn net shortage, 1913, assuming	
average shrinkage in supply.....	91,945
Record net shortage, 1907.....	87,000

It behooves both the shippers and receivers to work in harmony with the railroads of the country in trying to overcome this car supply shortage. As has been correctly stated, the large terminals in this country cannot take care of any more cars than are being handled by them today regardless of the fact that some people think that more equipment should be built.

Mr. Taylor lays particular stress upon this one point and trusts that the members of the association especially will work to this end, using the following slogan, i. e., ask for only the cars needed; load them to their full capacity; bill them out promptly when finished loading and by the shortest route. To the receiver it is suggested that immediately upon arrival the load be taken from the cars; as little switching as possible being done, therefore release this car for other service as every car unloaded makes another empty. Delay in loading or unloading reduces the average supply. Cars were built for transportation, not for storage.

ILLINOIS GRAIN DEALERS' ASSOCIATION

An important meeting of the Board of Directors of the Illinois Grain Dealers' Association was held in the La Salle Hotel, Chicago, Friday, October 3, at which twenty-two new members were voted into the Association, as follows: Charles Cunningham & Son, Cairo, Ill.; Cairo Milling Company, Cairo, Ill.; Daniel Bros., Bentley, Ill.; W. C. Frieling, Bonfield, (Frieling Switch); Farmers Elevator Company, Ridge Farm, Ill.; The Gillette Grain Company, Nashville, Tenn.; Samuel Hastings Company, Cairo, Ill.; John O. Linder, Loxa, Ill. (mail Charleston); The Mutual Grain Company, Indianapolis, Ind.; M. R. Meents & Son, Ashkum, Ill.; J. S. McClellan & Son, St. Louis, Mo.; Magee Grain Company, Cairo, Illinois; Nanson Commission Company, St. Louis, Mo.; O'Brien & Lambert, Morse, (Buda rfd No. 2), Ill.; T. D. Owings, Colusa, Illinois; Oreana Grain Company, Oreana, Ill.; W. D. Orthwein, St. Louis Mo.; Powell & O'Rourke, St. Louis, Mo.; J. J. Stack, Glenavon, Ill.; Thistlewood & Co., Cairo, Ill.; John T. West, Loda, Ill.; Yuton Grain Company, Yuton, Ill. (mail Bloomington).

A delegation consisting of the following named gentlemen from Cairo gave an oral invitation to the Board of Directors to hold the twenty-first annual meeting of the Association in the City of Cairo: H. S. Antrim, President of the Board of Trade, A. E. Rust, J. H. Galligan, H. R. Aisthorpe, C. S. Bourge, Orris Hastings, E. Stebbins, B. H. King. They put up such a strong argument and made such alluring propositions, that the Board unanimously accepted the invitation and fixed the twenty-first annual meeting for Tuesday, June 2, 1914, in Cairo, Illinois.

There was also an invitation from the Peoria Board of Trade to hold the next convention in that city, which had some supporters on the Board, but the Cairo delegation was so enthusiastic that they carried the day.

President Metcalf was authorized to appoint delegates to the National Convention to be held in New Orleans, October 14, 15 and 16, and the Board, by unanimous motion, instructed said delegates to use every honorable endeavor to secure the 19 per cent maximum moisture content for No. 3 corn.

There was considerable discussion in regard to Western Trunk Line Circular, issued by the rail-

roads, effective June 1, 1913, requiring a deduction of one fourth of one per cent on corn and one eighth of one per cent on other grain. This is looked upon purely as an attempt by the carriers to augment their revenue from grain, the proposed increase of one cent per hundred-weight having been suspended by the Interstate Commerce Commission. Inasmuch as the statutes of Illinois specifically rule with regard to actual shrinkage and loss in transit of grain, and the law having been enforced since 1871, it is hard to understand the vigorous activity of the carriers to secure these deductions. The Illinois law requires carriers to deliver all they receive in grain or pay the difference, and if the carriers prefer to pay claims rather than to put their equipment in order, it is up to them. Taking this view of the matter, the Board, by unanimous motion, instructed the claims committee and the attorney for the association to enforce to the full legal demand every claim filed through the Claims Bureau of the association, and as speedily as possible.

ASSOCIATION BRIEFS

The Ohio Grain Dealers' Association has selected Friday, October 31, as the date for the regular fall business meeting to be held at Columbus.

Secretary J. Vining Taylor has just issued the twentieth annual report of the National Hay Association, which contains the trade rules, list of firms the Association has investigated, the membership directory, and much other valuable and interesting matter.

At the close of the twenty-first annual meeting of the Michigan Bean Jobbers' Association, held in Grand Rapids, September 19, the following officers were elected: President, Fred Welch, Owosso; vice-presidents, C. F. Allmendinger of Ann Arbor, C. E. DePugh of Pontiac, and F. E. Kelsey of Bad Axe; treasurer, W. N. Isbell, Lansing; directors, J. E. Burroughs of Flint, F. E. Nowlin of Albion, John Murray of Carsonville, W. I. Biles of Saginaw, J. A. Heath of Lennox, K. P. Kimball of Lansing. The directors will elect a secretary.

The Kansas Grain Dealers' Association has had a number of additions to its membership roll this summer, according to a recent report of Secretary E. J. Smiley. The new members are: Potts-Caldwell Elevator Company, Bookwalter, Neb.; Kiro Mercantile Company, P. O. Silver Lake, Kan.; Russell Lumber Company, Gorham, Kan.; L. E. Warner, Fairview, Kan.; Farmers' Elevator Company, Beloit, Kan.; G. A. Forsee, Falun, Kan. Miltonvale Grain Company, Miltonvale, Kan.; Greensburg Grain Company, Greensburg, Kan.; Golden Belt Elevator Company, Ellis, Kan.; C. J. Honer, Clonmel, Kan.; M. P. Theilen Grain Company, Lucas, Kan.; Onaga Lumber & Grain Company, Onaga, Kan. The association is planning a trip for members and their families next spring, details of which will be announced later.

The National Hay Association reports the following list of new members since the last report: Myers & Co., Wren, Ohio; Merchants Hay & Grain Company, Indianapolis, Ind.; T. P. Riddle & Co., Lima, Ohio; F. P. Warren, Philadelphia, Pa.; R. T. Levy & Co., Knoxville, Tenn.; G. W. Long, Norfolk, Va.; C. R. Dickinson, Milford, Va.; F. E. Leighton, Jackson, Mich.; Mackenzie & Winslow, Fall River, Mass.; Moser, Frisinger & Sons, Rockford, Ohio; Fred Kalmbach, North Baltimore, Ohio; Sullivan Bros., Lime Springs, Iowa; G. C. Keen, Boyd, Wis.; W. M. West & Co., Mobile, Ala.; Wadsworth Feed Company, Cavette, Ohio; W. A. Noltmeier Company, New York, N. Y.; Wm. H. Excell, Hayt Corners, N. Y.; Tudor & Jones, Weedsport, N. Y.; Royal Feed & Milling Company, Jackson, Miss.; Meech & Stoddard, Middletown, Conn.; E. N. Manning, Briceton, Ohio; C. C. Haines & Son, East Liberty, Ohio; Morton & Co., St. Louis, Mo.; Ballard-Messmore & Co., St. Louis, Mo.

MONTANA QUARANTINE UNDER INVESTIGATION

For some time there has been a quarantine in Montana on all agricultural and horticultural products from Utah. The commission men of Montana have been exerting what pressure they could to lift the quarantine, but the alfalfa growers, backed by the newspapers of the state, have overwhelmed this influence. A change is predicted, however, upon the first hand investigation of the subject by experts appointed by the Governor of Montana. M. L. Dean, state horticulturist, and R. A. Cooley, entomologist for the Montana Agricultural College, have been sent to Utah for the purpose of determining the exact condition of Utah products, and upon their report will rest the outcome of the disagreement. The quarantine instituted by Montana was getting to be a serious thing for Utah growers, as reports of such matters made good copy for the newspapers who availed themselves to the limit in making capital out of the scare which the alfalfa growers had received.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

AN OLD FIRM GONE

Editor American Grain Trade:—Enclosed find draft for \$1 for one year's subscription to your paper. We have recently sold out our entire business at this place to the Holcomb-Dutton Lumber Company, of Sycamore, Ill. We were in business here over thirty years. Please change the address of our paper from Geo. Stanbury & Son to Edgar E. Stanbury, as the old firm has gone out of business.

Respectfully,
EDGAR E. STANBURY.
Holcomb, Ill.

NORTH DAKOTA BUSY

Editor American Grain Trade:—Threshing is going at full blast. Wheat is going 8 to 10 bushels to the acre; barley, 16; rye, 12; oats, 30 bushels. No flax threshed yet. Wheat is all a good No. 1 northern. Quite a few farmers are binning their stuff.

Mr. Bergh of Russo is building an elevator 10 miles south of here on the Drake & Bismark branch of the Soo Railway. The Osborne-McMillan Elevator Company has built an elevator at Semco and is ready for business.

Yours truly,
EARL A. THORPE.
Voltaire, N. Dak.

MILWAUKEE CHAMBER OF COMMERCE
OPPOSES CURRENCY BILL

Editor American Grain Trade:—A general meeting of members of the Chamber of Commerce of Milwaukee, Wis., will be held on Friday, October 10, at 4 p. m., for an open discussion of the Government's corn grades. There seems to be considerable doubt about whether the adoption of these grades would be advisable or not. A great many members think that it would result disastrously.

President Donahue has appointed Messrs. Wallace M. Bell and A. K. Taylor as delegates to represent the Chamber at the New Orleans meeting of the G. D. N. A.

Chief Inspector Breed will also go to New Orleans to be present at the meeting of the Chief Grain Inspectors' National Association meeting at the same time.

The board of directors recently went on record as not favoring the currency legislation now pending in Congress. The report of a special committee was adopted which contended that the Glass-Owen bill was wrong in principle and would be dangerous in practice. At the same time the board directed that the ballot of the Chamber be cast in favor of certain recommendations for changes in the present bill made by the committee on currency and banking of the Chamber of Commerce of the United States of America. The report had been submitted for a referendum of the members of the National Chamber.

Yours very truly,
H. A. PLUMB.
Milwaukee, Wis.

CONDITION OF CAR AT POINT OF ORIGIN

Editor American Grain Trade:—Why not consider the condition of car at point of origin, particularly where such car is inspected by carrier's agent or representative and reinspected by the shipper or his agent preliminary to loading bulk grain therein? A car that is suitable for bulk grain loading is one that can be made grain tight by proper care in the application of the coopeage material furnished; therefore, if a car is accepted as O. K. for bulk grain and carefully coopered and the carrier has standing instructions requiring station, train, and yard employees handling bulk grain to report the leakage, if any, during transit or while being switched or shunted in terminal yards, such car traveling from point of origin to final destination without record or report of the leakage of grain therefrom should be treated as having performed its duty.

That an inspected car, if carefully coopered by the shipper, will convey its load safely to destination is proved in various ways. First, by the close comparison of the weights, loading and unloading, where there is effective weighing service at both ends; second, by the fact that a very large proportion of the shippers have no shortage claims excepting where the evidence shows there was actual and material leakage of grain from the car during transit.

It is the clear right of those shippers who are painstaking to see that their grain is securely

coopered in the cars as loaded by them, to know that sheer differences between a shipper's report of loading weight and a consignee's report of unloading weight shall not be treated as sufficient evidence, establishing the proof that grain actually leaked or was lost from the car during transit; otherwise an unscrupulous or careless shipper would enjoy an advantage over a competitor which would be unjust.

Let us bear in mind in every case the facilities used to determine a variation short or over, as the case may be, and the likelihood of those facilities to show material variation. A grain shipper buying grain from farmers over a wagon scale, hauling such grain from elevator scale to elevator dump, dumping the grain into elevator sink, thence to be re-elevated into bins and there held until the cars are loaded, should bear in mind constantly the measure or extent of discrepancy or error likely to exist in the weight certified by him. It is not fair or tenable for such shipper to say that it is the duty of the carrier to verify the loading weight, because that is not the carrier's duty.

By the foregoing it is not inferred that a carrier should seek to evade its full and lawful responsibility to the shipper for the safe delivery at destination of the entire quantity of freight received by it at point of shipment, subject, of course, to any inherent or natural shrinkage, normal wastage, incident to such transit. On the other hand, it is equally important that a sheer difference between the reports of loading and unloading weights by shippers and consignees is not proof that a car actually leaked or lost grain during transit.

The importance of registering grain leakage based on hammer-testing cars is, I am sure, underestimated at certain bulk grain unloading points where inspectors operating for consignees, boards of trade or others, hammer car sheathing and register defects of equipment or leakage based upon such artificial tests. The evidence of irregularity and unreliability is proven beyond question by two positive tests, to-wit:

By a sheer comparison of the returns of leaky cars as registered by the various terminal grain weighing departments. Some of these have shown more than five times as many leaky cars as others.

An analysis of very carefully obtained weights at both ends on thoroughly coopered cars will show that many of these over-zealous or otherwise hammer-testers will register leakage condition against cars the weights for which in over 75 per cent of the cars so reported proved beyond reasonable doubt that there was no actual loss of grain beyond the normal shrinkage during transit. In view of this fact, would it not be well to bring pressure to bear to deal with each car strictly on the merit of its performance. Under a proper instruction the yard or train employees handling bulk grain will not only see the leakage of grain in at least nine cases out of ten, but they will, or can be made to, record or report such leakage when seen. As stated in former communications, where the leakage of bulk grain from a car develops during transit, the evidence of loss will show repeatedly when a car is started and stopped or switched or shunted, so that the chance of a numerous crew in attendance upon such car not seeing actual leakage is remote. We are all too prone to look upon the exceptional freak performance of a car as typical. Why should we not take into consideration the present appearance of terminal railroad yards compared with a few years ago? Again we should be very careful not to be misled by the leakage from a car today which is in evidence for ten days. The freight traffic manager of one of the large systems informed me today that while traveling through one of the Chicago terminal yards yesterday he saw a streak of grain, corn, that continued over several miles of right-of-way. It was perfectly evident to him that all of this grain had leaked from a single car. He remarked that the car in question must have lost a great many thousands of pounds. Unquestionably the employees handling the car saw the leakage. It is also reasonably certain that the same streak of grain being along one of the suburban passenger routes, will be witnessed by many, many passengers, some of whom are grain shippers, for days to come, until gradually the evidence of this one leakage shall have disappeared. But, on the other hand, why should we not take into consideration the testimony of innumerable yardmasters and freight train conductors to the effect that grain leakage from cars during transit or while cars are being switched has been very greatly and very perceptibly reduced, and on various roads almost entirely eliminated.

The chief purpose of this letter is to appeal directly to the honest and straightforward grain ship-

per and receiver for co-operation and assistance against the trail of impostors that the former existing doubt in relation to a car's performance has inflicted upon those directly concerned.

No carrier should willfully seek to avoid the payment of a claim where evidence of loss is adequately established. On the other hand, evidence of a suitable car and grain-tight condition during transit should by all means receive the full consideration to which it is entitled if indeed carriers are in duty bound to prevent the collection of improper claims and consequent discrimination.

It must not be urged from this that a carrier is in duty bound to catch so accurate a weight of the grain as loaded and again as unloaded as would be necessary to intercept these "phony" irregular grain shortage claims, for the simple reason that to undertake such a burden would entail upon the carriers a service for which they would have to assess a very material increase in their freight charges upon the shipments carried. What we need is honest, faithful co-operation all along the line and honest, faithful and prompt declaration of the actual weight as loaded in the form of a certificate setting forth the scale, the dates and drafts weighed, the total weight loaded and the signature of the person who performed the weighing and from own knowledge certifies the actual weight of all the grain actually shipped or received in a car, and the proper inspection and record of the car's physical condition when tendered for loading, the tendering of proper coopeage material, enabling the shipper to safely cooper his grain in car as loaded, the proper handling in transit and faithful report of leakage of grain, if any, from a car during transit or while being switched.

Every grain shipper knows that there is a wide discrepancy between the weighing service rendered by various terminal grain weighing departments. Some of these are very thoroughly supervised and in consequence the uniform accuracy of their weights has become a byword with the grain shipping and grain receiving public. On the other hand, there are markets that are alleged to have board of trade or grain exchange supervision at many of which the weighing is performed by the employe of the industry without any positive effective supervision on the part of the existing or so-called weighing department. Why should not the grain shipping trade insist upon every market standing strictly upon its true merit and calling the weights as certified by their true and original name. If, indeed, they are board of trade weights, obtained under thoroughly safe weighing regulations, let them be declared as such, but if, on the other hand, they are merely the weights of interested shippers or consignees, let us call them shippers' or consignees' weights and not board of trade weights. So it is with a great many of the inspections of cars laden with grain on arrival at grain unloading industries; an interested employe of the industry, a consignee, hammers the car just before grain is unloaded therefrom and seeing a kernel of any grain, a sheer semblance in evidence of leakage, will register against the car such a notation as will surely mislead the claim department investigator into the belief that the car gave evidence of having leaked grain. It is not fair or just as between shippers and receivers that such a condition should prevail. Let us trust that under the resolution quoted in a previous communication and which will bear repetition here, to-wit:

That the carriers' claim departments and the weighing and inspection bureaus co-operate with local freight agents, terminal grain weighing departments and grain door reclamation and coopeage agencies, in devising means of eliminating the causes of grain shortage claims, there will be very complete co-operation as between all of the parties at interest.

Yours truly,
F. C. MAEGLY,
Asst. Gen. Freight Agent,
A. T. & S. F. Railway.

Chicago, Ill.



From Zahm's Red Letter, October 11.
REPORTS SAY HE DID

TRANSPORTATION

These changes in rates affecting grain and grain products are furnished to the "American Grain Trade" by the General Traffic Association, Inc., 715 Fourteenth Street, N. W., Washington, D. C. If any of our readers feel that the present rates or those which are about to become effective are unjust, excessive or discriminatory, this company has agreed to take care of such matters before the Interstate Commerce Commission, at only a nominal cost.

Since our last issue the following new tariffs have been filed with the Interstate Commerce Commission, naming rates on grain and grain products, with the I. C. C. numbers, effective dates and rates in cents per one hundred pounds. (A) denotes advance and (R) denotes reduction.

Chicago, St. Paul, Minneapolis and Omaha

Supplement 12 to I. C. C. No. 36 to I. C. C. No. 3679, Oct. 12. Grain products from St. Paul, Minneapolis, Minnesota Transfer, Mankato, Blue Earth, Winnebago, Madelia, Minn., Le Mars, Iowa, to Atchison, Leavenworth, Kan., Kansas City, St. Joseph, Mo., 14 cents; Nebraska City, Neb., 14 cents; from Sioux Falls, S. D., to same points, 15 cents. Grain products from Atchison, Leavenworth, Kan., Kansas City and St. Joseph, Mo., to Pipestone, Minn., 14 cents; from St. Paul, Minneapolis, Minnesota Transfer, Minn., to Aurora, Carthage, Mo., 21 cents; Booneville, Mo., 21.5 cents; Fort Scott, Kan., 19 cents; Fort Smith, 28 cents; Harrisonville, Mo., 19 cents; Joplin, Lamar, Liberal, Mo., 21 cents; Nevada, Mo., 19 cents; Pittsburg, Kan., 21 cents; Sedalia, Mo., 21.5 cents; Van Buren, Ark., 28 cents; from St. Paul, Minneapolis, Minnesota Transfer, Blue Earth, Winnebago, Pipestone, Madelia, Slayton, Minn., Sibley, Iowa, Sioux Falls, S. D., to Lincoln, Neb., 17 cents; from Mitchell, S. D., to Lincoln, Neb., 20 cents; from St. Paul, Minneapolis and Minnesota Transfer, Minn., to Jefferson City, Mo., and stations taking same rates, 21.5 cents; from Adrian, Blue Earth, Minn., Le Mars, Iowa, Madelia, Mankato, Winnebago, Minn., to Nebraska City, Neb., 14 cents; from Sioux Falls, S. D., to Nebraska City, Neb., 16.5 cents.

Supplement 11 to I. C. C. No. 3837, effective Oct. 14. Grain products from St. Paul, Minneapolis, Minnesota Transfer, Stillwater and Mankato, Minn., to Maryville, Mo., 14 cents; from Arian, Blue Earth, Minn., Le Mars, Madelia, Mankato and Winnebago, Minn., to Nebraska City, Neb., 14 cents.

I. C. C. No. 3927, Oct. 19. Grain products from St. Paul, Minneapolis, Minnesota Transfer and Stillwater, Minn., to Duluth, Minn., and Itasca, Wis., when destined beyond, 5 cents, applies only on traffic destined to ports on Lake Michigan, Lake Huron and Lake Erie, or points beyond or for re-shipment from Duluth, Minn., or Itasca, Wis.

Chicago, Rock Island and Pacific

I. C. C. No. C9565, effective Oct. 6. Oat meal and rolled oats from Cedar Rapids and Muscatine, Iowa, to Winona, Minn., and La Crosse, Wis., C. L., 15 cents, and L. C. L., 25 cents.

Supplement 4 to I. C. C. No. C9422, Oct. 27. Grain products from St. Paul, Minnesota Transfer, Minneapolis, proportional only to De Pue Junction, Moronts, Granville, Priscilla, McNabb, Millo, Altmar Vulcan Works, Streator, Ill., 10 cents (R).

Atchison, Topeka and Santa Fe

Supplement 10 to I. C. C. No. 6276, effective Oct. 31. Flour from Newton, Kan., to Chelsea, 25½ cents; Claremore, Okla., 24 cents; to Sapulpa, Okla., 28½ cents; and Webb City, Mo., 12½ cents. Also effective (state) Sept. 21, (interstate) Oct. 31, bran, chop feed (other than wheat chops), corn meal (R) middlings and shorts from Stafford, Kan., to Aurora, Carthage, Clinton, Mo., Fort Scott, Kan., Paola, Parsons, Kan., Rich Hill, Mo., Galena, Kan., Liberal, Mo., 11¼ cents.

Wabash

I. C. C. No. 3282, cancelling 3099 R. R. D10962. Wheat to Cairo, Ill., and Evansville, Ind., destined to southeastern or Carolina territory from Chapin, Morgan, Neeley's, Pittsfield, New Salem, Bayles, Hadley, Barry, Stone Switch, Kinderhook and Hulls, Ill., 10 cents; Spencer, Aladdin, Shepherds, East Hannibal, Algiers, Gordons, Mungers, Fall Creek, Bluff Hall, Marble Head, Menke's, Lamberts, 9 cents; Meredosia, Perry Springs, Versailles, Gilberts, Herman, Mt. Sterling, Carthage, Hamilton, Ill., 10 cents.

I. C. C. No. 3288, Oct. 26. Wheat originating on the south side of the Missouri River from De Witt, Mo., to St. Louis, Mo., 9 cents.

Chicago Great Western

Supplement 6 to I. C. C. No. 4889 effective Nov. 1. Wheat between Rochester, Minn., and Douglas, 3.3 cents; Pine Island, 4.4 cents; Lena, 4.6 cents, and Zumbrota, Minn., 4.8 cents.

Supplement 8 to I. C. C. No. 4749, R. R., G. F. D.

15170, Oct. 10. Between Peoria, Ill., and rate points, and Oelwein, Fairbanks, Dunkerton, Dewar, Waterloo, Cedar Falls Junction, Blackhawk, Hudson, Hicks, Reinbeck, Berlin, Gladbrook, Green Mountain, Rockton, Westgate, Iowa, flax and millet seed, 17½ cents; wheat and flour, 14 cents; corn, oats, rye and barley, 13 cents; Meservey and Palsville, Iowa, flax and millet seed, 18 cents; wheat and flour, 15 cents; corn, oats, rye, and barley, 15 cents.

I. C. C. No. 4907, Oct. 8. Wheat and flour and articles taking same rates from Council Bluffs, Iowa, Kansas City, Mo.-Kan., Leavenworth, Kan., Omaha, Neb., St. Joseph, Mo., and South Omaha, Neb., to Escanaba, Mich., 23¼ cents; Hancock, Houghton, 27¼ cents; Ishpeming and Negaunee, Mich., 23¼ cents (A).

Chicago, Milwaukee and St. Paul

Supplement 5 to I. C. C. No. B2591, Oct. 23. Corn, rye, oats and barley between Duluth, Minn., Cloquet, Minn., Superior, Wis., St. Paul, Minneapolis, Minnesota Transfer, Minn., and Franklin, Nortonville, Millerton, N. D., 14.5 cents; Sydney, Klose's Spur, Jamestown Junction, 14 cents; Homer, 13 cents; Jamestown, N. D., 13 cents; flax seed and articles taking same rates between same points and Franklin, Nortonville, Sydney, Jamestown Junction, Homer, N. D., 15.5 cents; Jamestown, N. D., 14 cents; wheat and articles taking same rates between same points and Franklin, Nortonville, Millerton, 14.5 cents; Sydney, Klose's Spur, Jamestown Junction, 14 cents; Homer and Jamestown, N. D., 13 cents.

I. C. C. No. B2781, Nov. 1. Wheat, corn, rye, oats and barley from St. Paul, Minneapolis, Minnesota Transfer, Minn., applies on shipments or parts of shipments originating beyond (A) to Adventure, Atlantic, Beacon Hill, Belt, Coles Creek, Dollar Bar, Edgemoor, Elm River, Freda, Greenald, Hancock, Houghton, Messner, Mill Mine Junction, Obenhoff, Painsdale, Peppard, Redridge, Ricedale, Salmon Trout, Seager, Senter, South Range, Stackpole, Stanwood, Stonington, Toivola, Trimountain, Twin Lakes and Winona, Mich., 15.5 cents; grain products, 17 cents; grain products from Graceville, Minn., to same points, 23.5 cents; from Graceville, Minn., to Lake Linden, Mich., 26.5 cents. Wheat, corn, rye, oats and barley from St. Paul, Minneapolis, Minnesota Transfer, Minn., to Lake Linden, Mich., 18.5 cents; grain products, 20 cents.

I. C. C. No. B2780, Nov. 1. Flour and mill stuffs from St. Paul, Minneapolis, Minnesota Transfer, Minn., to Joplin, Mo., 21 cents; Pittsburg, Kan., 21 cents; Ft. Scott, Kan., 19 cents; Carthage, Mo., 21 cents; Liberal, Mo., 21 cents.

Chicago, Burlington and Quincy

I. C. C. No. 10862, Oct. 16. Flour and other grain products from Council Bluffs, Pacific Junction, Iowa, Omaha, South Omaha, Nebraska City, Neb., Kansas City, St. Joseph, Mo., Atchison and Leavenworth, Kan., to Attica, Ind., Cincinnati, Hamilton, Ohio, Jeffersonville, Ind., Louisville, Ky., and New Albany, Ind., 17 cents; to Indianapolis, La Fayette, Monon, Oxford and Rensselaer, Ind., 16½ cents.

Supplement 1 to I. C. C. No. 10753, Oct. 1. Feed, glucose and molasses from Clinton and Lyons to Handy, Ind., 8 cents; Washington, Farmdale and East Peoria, Ill., 7 cents (R).

I. C. C. No. 10852, Oct. 1. Wheat, barley, corn, oats, rye and grain screenings only from St. Louis, Mo., East St. Louis, Ill., to Milwaukee, Wis., 10 cents; barley, corn, rye and oats from Lyndon Sands, Sterling, Rock Falls, Ill., to Milwaukee, Wis., Racine, Waukesha, Wis., Rondout, Libertyville, Gray's Lake, Round Lake, Long Lake, Ingleside, Fox Lake, Spring Grove, Solon Mills, Belden, Armsby, Ill., Zends and Walworth, Wis., 8 cents.

Supplement 1 to I. C. C. No. 10753, R. R., G. F. O. 9728-B, Oct. 1. Feed, glucose and molasses from Clinton and Lyons, Iowa, to Washington, Farmdale, East Peoria, Ill., 7 cents (R); to Handy, Ind., 8 cents.

I. C. C. No. 10852, Oct. 1. Wheat, barley, corn, oats, rye and grain screenings only from St. Louis, Mo., and East St. Louis, Ill., (when originating beyond) to Milwaukee, Wis., 10 cents.

Canadian Pacific

I. C. C. No. E1589, Oct. 11. Wheat and oats from Port McNicoll, Ont., to Boston, Mass., for export, wheat, 6 cents per bushel of 60 pounds; oats, 4 cents per bushel of 32 pounds.

Chicago and North-Western

Supplement 9 to I. C. C. No. 7402, Oct. 15. Grain products from Yankton, S. D., to Sioux City, Neb., 13.5 cents; Dakota City, Neb., Coburn, Neb., 14 cents; Jackson, Vista, Neb., 14.5 cents; Ponca, Newcastle, Maskell, Wynot, Neb., Obert, Neb., 15 cents; Hubbard, Nacora, Emerson, Neb., 14 cents; Wakefield, Concord, 16 cents; Laurel, 16.5 cents; Cole-

ridge, Neb., 17.5 cents; Hartington, Neb., 17.5 cents; Fordyce, Neb., 18.5 cents; Crofton, Neb., 19 cents; Wayne, Ind., 17 cents; Carroll, Sholes, Randolph, Neb., 17.5 cents; Magnet, Neb., 18.25 cents; Wausa, Neb., 19.25 cents; Bloomfield, Neb., 19.75 cents.

Missouri, Kansas and Texas

I. C. C. No. A3895, Oct. 17. To Memphis, Tenn., from Piqua, Humboldt and Chanute, Kan., corn, 18 cents, and wheat, 19½ cents (also applies on articles taking same rates) (R).

Supplement 8 to I. C. C. No. A3742, Oct. 17. Between Milton, Okla., and St. Louis, Hannibal, Mo., Alton, East St. Louis and East Hannibal, Ill., corn, 20 cents; linseed meal, 20 cents; wheat, 23½ cents; flax seed, 26½ cents; millet seed, 26½ cents, and hemp, 29½ cents; between Milton, Okla., and Chicago, Ill., corn, linseed meal, 23 cents; wheat, 26½ cents; flax seed, 31½ cents; millet seed, 31½ cents, and hemp seed, 34½ cents.

St. Joseph and Grand Island

Supplement 7 to I. C. C. No. A357, Sept. 15. (S. P. 25743) between St. Joseph, Mo., flour, 11.75 cents; wheat, 11.75 cents; corn, linseed meal, 10.75 cents; flax seed, millet seed, 14 cents.

Elgin, Joliet and Eastern

Supplement 8 to I. C. C. No. 1236, Oct. 7. Corn from Chicago Heights, East Joliet, Joliet, Ill., Hammond, Ind., South Chicago, Ill., to Halifax, N. S., 24 cents (R); Toronto, Ont., 12 cents, proportional rate. Outbound shipments from such points to be forwarded at established tariff rates to final destination.

Minneapolis, St. Paul and Sault Ste. Marie

Supplement 7 to I. C. C. No. 3193, Oct. 10. Malt and malt sprouts between Minneapolis, St. Paul, Camden Place, Minnesota Transfer, Gloster, North St. Paul, Minn., and New Richmond, Wis., and Duluth, Minn., Superior, Gordon, Wis., and Moose Lake, Minn., north and south-bound, 5 cents; Ashland, Wis., north and south-bound, 7.5 cents, Oct. 10.

I. C. C. No. 3352, Oct. 15. Corn from Minneapolis, St. Paul, Minnesota Transfer, Duluth, Minn., Superior, Wis., and rate points to Hosmer, Michael and Fernie, B. C., 55 cents. Wheat, oats, barley and flax seed from Port Arthur, Fort William and Westfort, Ont., to Minneapolis, St. Paul, Minnesota Transfer, Duluth, Minn., and Superior, Wis., 24 cents.

Delaware, Lackawanna and Western

I. C. C. No. 9487, Oct. 6. Linseed oil (in iron drums, or in wood) from Buffalo, East Buffalo, Black Rock, Harriet and (R) Kensington, N. Y., to Jacksonville, Fla., 26 cents, (R) and Savannah, Ga., 26 cents.

Missouri Pacific

I. C. C. No. A2408, Oct. 15. Bran from Coffeyville, Kan., to Galena, Kan., 8 cents; flour from Chetopa, Kan., to Hugo, Okla., 32 cents.

St. Louis and San Francisco

Supplement to I. C. C. No. 6256, Oct. 12. Corn, oats, rye and barley (east or south bound) between Kansas City, Mo., Leavenworth, Atchison, Kan., St. Joseph, Mo., Omaha, South Omaha, Nebraska City, Neb., and Council Bluffs, Iowa, and Ackerman, Miss., 27 cents.

Supplement 17 to I. C. C. No. 6257, Oct. 28. From Memphis, Tenn., to Akton, Patmos, Hennessy, Baker, Kafton, Gamma, Stamps, Buchanan, McKamie, Experiment, Bussey, Taylor, Ark., wheat 22 cents; flour, buckwheat flour, pancake flour, oat meal, rolled oats, oat groats, rolled wheat, cracked wheat, and crushed wheat, 25 cents; corn, kaffir corn, rye, oats, barley, grain screenings, sorghum, seeds and corn chops, 20 cents; corn meal, bran, grits, hominy, feed, brewers' meal, brewers' grits and mill feed, 23 cents, Oct. 28.

Toledo and Ohio Central

I. C. C. No. 2060, Sept. 15. Ex-lake barley from Toledo, Ohio, to Baltimore, Md., 11.5 cents; Boston, Mass., 12.5 cents; New York, N. Y., 12.5 cents, and Philadelphia, Pa., 12 cents; rye, oats, and wheat to Baltimore, Md., 11.5 cents; Boston, Mass., 12 cents; New York, N. Y., 12 cents; Philadelphia, Pa., 11.5 cents; Boston, Mass., and New York, 11 cents (all rates apply for export).

Illinois Central

Supplement to I. C. C. No. A8231, Nov. 1. Grain and products to Chester and Steeleville, Ill., from St. Louis, Mo., 5 cents; East St. Louis, Ill., 4 cents (A).

Minneapolis and St. Louis

I. C. C. No. Bill, Oct. 15. Corn, oats, rye and barley to Memphis, Tenn., from Albert Lea, Glenville, Gordonville, Minn., 21 cents; Northwood, Kensett, Manly, 20 cents; Grinnell, 17.5 cents, and Newton, Iowa, 18.5 cents.

Supplement 32 to I. C. C. No. 1842, Oct. 12. Flour and millstuffs from Minneapolis, Minnesota Transfer and St. Paul, Minn., to Meyers, Ill., to San Jose, Ill., included; Matrona, Ill., to Jacksonville, Ill., included, 14 cents (applies only when originating beyond or manufactured from grain originating beyond), rate will be 10 cents per 100 pounds.

Supplement 4 to I. C. C. No. B80, Oct. 27. Wheat flour from Minneapolis, Minnesota Transfer, St. Paul, Minn., (applies only on shipments originating beyond or manufactured from grain originating beyond) to Amoret, Amsterdam, Mo., 19 cents; As-

bury, Mo., 21 cents; Cleveland, Drexel, Eve, Mo., 19 cents; Frontenac, Fuller, Kan., 19 cents; Gulton, Mo., 21 cents; Hume, Jaudon, Mo., 19 cents; Lisle, Merwin, Mulberry, 19 cents; Oskaloosa, Mo., 19 cents; Richard, Stotesbury, West Line and Worland, Mo., 19 cents (R).

Great Northern

Supplement 6 to I. C. C. No. A3640, effective Oct. 20. Oatmeal, rolled oats and oat groats from Chicago, Ill., and Burlington, Iowa, to Duluth, Minn., rate points and Superior, Wis., 18 cents; rate from Cedar Rapids, Iowa, 17½ cents.

Supplement 2 to I. C. C. No. A3729, Oct. 8. Between St. Paul, Minnesota Transfer, Minneapolis, Minn., and rate points and Booge, S. D., Manley, Hills, Minn., wheat and articles taking same rates, 11 cents; corn and articles taking same rates, 10 cents; flax seed, 14.5 cents (R), and numerous other rates.

Northern Pacific

I. C. C. No. 5432, Oct. 20. Oats (rolled) and oatmeal from Ft. Dodge, Iowa, to Breckenridge, Wahpeton, N. D., 20.5 cents; Fargo, N. D., and Moorhead, Minn., 21 cents.

HAY AND STRAW

The Dalton Feed Company, of Dalton, Ga., has sold its stock to Dennis Barrett.

J. B. Hawkins has sold his feed store at Matagorda, Texas, to A. H. Wadsworth.

The Columbus Elevator Company, of Columbus, Mont., has purchased a portable alfalfa mill having a capacity of two tons hourly.

Louis Jeffrey, of Zurich, Ont., has sold his flour feed and grocery business to Douglass & Spark, who took possession on Oct. 15.

The firm of Seibert & Clawson, feed dealers at Tippecanoe City, Ohio, has been dissolved, and the business will be continued by A. Z. Clawson.

The Main Street Feed Store at Edmonton, Alta., which was recently damaged to a considerable extent by fire, has been opened again in a new location.

The Vollmer Wholesale Hay and Grain Company, Inc., has been incorporated at Los Angeles, Cal., by L. H. Vollmer, F. M. Delaux, Peter Crampton and D. Bostwick.

J. C. Woodcock has removed his feed mill to Arkansas City, Kan., from Cherryvale, Kan., where he began operations on Oct. 1 as the Boss Feed Milling Company.

The Skillman Feed Company, Inc., recently incorporated at Owensboro, Ky., with a capital stock of \$30,000. The incorporators are W. R. Skillman and K. Skillman.

The Balfour-Guthrie Company has acquired a site near Martinez, Cal., upon which it will soon erect an alfalfa mill in which alfalfa products of all kinds will be manufactured.

The Loveland Alfalfa Milling Company was recently incorporated at Loveland, Colo., with a capital stock of \$8,000. The incorporators are E. C. Tarkington, A. Cox and J. B. Bell.

It is stated that within the next six months the Ottaway Company, of Wichita, Kan., will erect a 100-ton alfalfa meal mill at Holly, Colo. The company has purchased five acres of land and it is probable that construction work will soon begin.

Farmers of southwestern Georgia attended "Alfalfa Day" exercises at Americus, Ga., on Sept. 15, which were given under the auspices of the Americus Chamber of Commerce. A number of addresses with reference to forage crops and other agricultural subjects were given by Charles J. Haden, president of the Georgia State Chamber of Commerce, and others.

It is reported that the Standard Grain Company, Basin, Wyo., has made arrangements with the M. C. Peters Mill Company, of Omaha, Neb., for the establishment of an alfalfa mill at Basin, the farmers in that district to furnish the mill with 1,500 acres of alfalfa the first year and 2,000 acres the following four years. The Peters Company, it is said, will pay \$6.50 per ton for the hay. The Omaha organization now operates mills at Worland and Powell, Wyo.

W. J. Armstrong Company, Milwaukee, Wis., writes us under date of Oct. 7: "Our market still continues very strong, receipts just about being equal to the demand, and arrivals are being cleaned up every day. Hay is selling at full quotations and we do not look for any decline for at least two weeks. There is every indication, however, of a big increase in the receipts before the end of the month and lower prices may be expected. We are absolutely certain any hay shipped now will bring better prices than if shipped next month."

Norway produces more than enough hay for domestic consumption and therefore exports a small amount. The two kinds of hay ordinarily produced are a mixture of white clover and timothy for feeding horses, and a mixture of red clover and timothy for cattle. These products are usually sold by the bale in Norway and by the ton for export. At present, there seems to be no market for alfalfa in Norway, but there is a good market for timothy

and clover seed. In 1911, over 100 tons were imported, of which one ton came from the United States, 39 tons from Sweden, 28 from Germany, and 22 from Denmark.

NOXIOUS WEEDS A GOLD MINE

The most valuable carload of grain ever shipped out of central Kansas consisted of 311 sacks of sweet clover seed, for which Charles I. Zirkle of Garden City received a check for \$9,186.99. For years the farmers throughout the West have been fighting sweet clover and the Russian thistle, or tumble weed, as weeds and pests. Several attempts have been made to induce state legislatures to enact laws requiring their extermination, but now they have been "discovered" as roughage more valuable even than alfalfa.

The credit for the discovery rests with New England, where it was found that sweet clover would grow on the worn out and abandoned farms and would build up the soil in quite a remarkable manner. The plants only live for two years, and the roots, extending a foot to twenty inches deep, rot and add humus to the soil, besides opening the ground and letting in air and water.

In the West the value of the crop as feed was discovered accidentally. A patch of it appeared in a hay field in Finney county, Kansas. It was cut and stacked with the other hay, and when the cattle were turned into the hay the farmer, Mr. Shull, was surprised to find that they would not touch the other hay until the sweet clover was all eaten.

Samples of sweet clover have been sent to various agricultural stations and in every case its great value has been reported. Its food value per ton is \$18.40, as against that of red clover of \$14.12. J. C. Mohler, assistant secretary of the Kansas Board of Agriculture, is quoted as saying: "Sweet clover is going to be a rival of alfalfa as a forage crop. It grows well, makes big yields of hay and seed on land where alfalfa will not even sprout except in the most favorable seasons. It is a soil renovator that

has no equal in Kansas, and is a wonder on thin upland soils. Its roots penetrate the hardest ground and the plants grow luxuriantly on the poorest land in Kansas in the poorest seasons."

The Russian thistle has also come into its own as a roughage crop. If it is cut and stacked before the stems and thorns are hard, stock will eat it with avidity and it has a high food value. Attempt at legislation against this plant has also been made, but as it has not been exterminated it will mean many dollars in the pockets of western farmers during the lean years.

CHICAGO HAY MARKET

Albert Miller & Co., Chicago, say of timothy hay early in October: "Arrivals continue very small, while demand both locally and shipping keeps good. Prospects are light receipts will be the rule for a few weeks now and a continuation of the present favorable prices. Where possible to do so shippers should take advantage of present favorable conditions to market some timothy. All grades will sell readily. Of prairie hay a splendid demand exists for Nebraska, Dakota and Minnesota, with arrivals still very small."

PITTSBURGH HAY REPORT

Samuel Walton Company, of Pittsburgh, Pa., report October 3: "We have had light receipts of hay during the week, the result of which is higher prices are now being obtained, and we have every reason to believe there will be no change in the situation in the very near future. We would advise the shipment of No. 1 timothy hay, good No. 2 timothy hay and good green No. 1 clover hay, but it is very difficult to move No. 2 clover hay. We continue to have sufficient straw arriving to meet the demand, with the market barely holding steady. The receipts of oats have been light, with the arrivals finding ready sale at advanced quotations. We continue to have a very unsatisfactory market for both ear and shelled corn."

HAY NOURISHMENT SOLUBLE

The effect of rain on hay was the subject of a paper read before the American Chemical Society recently by J. A. McCleve in which he discussed the chemical constituents of hay before and after it had been washed by rain.

After experimenting on all the different varieties of hay it was found that any hay which had been seasoned and then wet by rain and then allowed to dry again loses much of its value and palatability as a food. The sugar and a large part of the other nourishing elements in hay are soluble and 25 to 50 per cent of them are dissolved out and wasted when the hay is wet.

If the hay is rained on before it is thoroughly seasoned not so much of the value is lost, but even in these cases something like 40 per cent of the sugar content is dissolved. Mr. McCleve pointed out, in the light of these facts, how important were proper curing methods, those in general use in the East being vastly superior to the method of treating on the western farms.

BARLEY AND MALT

The full rigged ship *William P. Frye*, one of the last of the old-time American sailing vessels, sailed from San Francisco for New York on Sept. 19 with a cargo of California barley said to be the largest ever sent out from that state. The vessel carried 103,000 sacks, 5,576 tons dead weight.

H. V. Harlan, barley specialist at the Minnesota University farm, has gone to Peru to take charge of extensive agricultural development investigations for the Peruvian corporation in the Lake Titicaca district. Mr. Harlan has been granted a year's leave of absence by the United States Department of Agriculture.

The Fond du Lac Malting Company, Fond du Lac, Wis., has installed new equipment in its plant which was recently placed in operation. The first malting in the remodeled plant was done on Sept. 20, and shipments will begin the latter part of this month. John Brill will act as superintendent of the elevator and Emil Trotsch, of Minneapolis, Minn., will superintend the malt house.

It is stated in the "Western Brewer" that ammonia in small quantities, such as that present in chimney fumes, has little effect in retarding the germination of sound barley, but may delay that of weathered barley considerably, and that in the case of green malt it causes the rootlets to shrivel, turn color and die off. This is said to be due to the

penetration of the ammonia into the tissues of the rootlets, where it neutralizes the acids of the sap, eventually killing the roots.

According to consular reports, early estimates of the Belgian barley crop of 1913 place the yield at 210,077,579 pounds. The average annual production for the decade 1901-1910 was 218,290,679 pounds, while the annual consumption for the last 10 years has been 851,464,146 pounds, making importation of barley a necessity. In the past, Belgium has imported most of its barley from Roumania, Bulgaria, Russia, Turkey, the Netherlands, India, and Egypt, but it is probable that, owing to the war in the Balkan States and Turkey, the usual supply from three of these countries will be deficient this year.

The American Malting Company, of New York City, recently closed its fiscal year, when its report showed its net earnings to be less than any year since 1910. They amounted to \$403,368, compared with \$810,319 in 1912 and \$763,941 in 1911. The 1913 net is equivalent to 2.79 per cent on the Malting company's \$14,440,000 preferred stock and 4.62 per cent on the \$8,799,000 preferred of the Malt Corporation. The American Malt Corporation has declared a semi-annual dividend of \$2 a share on preferred stock, payable on November 3 to stock of record October 16, and the American Malting Company has declared a dividend of \$1.24 on its preferred stock.

FIELD SEEDS

James B. Kline has purchased the seed and feed business of George C. Tift at Cuyahoga Falls, Ohio.

The Muscatine County (Iowa) Crop Improvement Association set apart the last week of September as "Seed Corn Week."

The Buffum Pure Seed Company has been incorporated at Wilmington, Del., with a capital stock of \$1,000,000. The incorporators are H. E. Latter, W. J. Maloney and O. Reichard.

Nebraska farmers have been urged to care for their seed corn, as this year's crop is but 35 per cent of the normal yield, according to reports from the State Agricultural College.

During the last week of September, County Soil Expert Coffeen and associates gave demonstrations in the selection of seed corn at various points throughout Elkhart County, Ind.

In an effort to boost "Corn Day" in Illinois, which occurs on Nov. 7, many public schools will have special programs dealing with the cultivation of corn and its importance as an agricultural product.

The contests of the Better Farming Association have created much enthusiasm and very satisfactory results in North Dakota this year. It is stated that there is an unlimited supply of acclimated seed corn of the very highest quality and maturity. Many farmers are said to be saving a sufficient supply for a two-year period, 95 per cent of the corn grown under the contests having matured.

The new state seed testing laboratory at the Minnesota University farm is being housed in a building formerly used as a gymnasium, and the equipment, including a compressed air cleaning machine and five copper germinators, has been installed. In connection with the pure seed work the station herbarium has been enlarged. This now includes more than 2,500 varieties of Minnesota seeds.

Minnesota seeds will be given a test in the high lands of the Andes, when H. V. Harlan, barley specialist of the University of Minnesota, conducts his investigations in the Lake Titicaca region of Bolivia and Peru for a Peruvian railway corporation. Mr. Harlan sailed for South America on October 4, taking with him a large variety of hardy seeds, including wheat, barley and grass seeds, also trees and shrubs.

Michigan now has a statute covering pure seeds and it specifies that grain seeds containing more than one noxious seed, that is, Canada thistles, quack grass or clover and alfalfa dodder, to 2,000 good seeds, must not be sold, offered for sale or sown on Michigan lands. Seeds may be submitted to the State Board of Agriculture for tests, the fee for each test being 25 cents. The provision does not apply to persons selling seeds direct to seed merchants or shipping to a general market to be cleaned or graded before offered for sale, agricultural seed held in storage for the purpose of being cleaned, and agricultural seed marked "not cleaned" and held or sold for shipment outside the state only. The maximum fine for violation is \$100.

SUMMARY OF CLOVER SEED CONDITION

Southworth & Co., of Toledo, early this month received 190 reports on clover seed from Ohio, Indiana and Michigan, with scattering reports from Illinois, Wisconsin and Iowa. A summary gives acreage 70 per cent increase compared with last year; threshing completed to Oct. 1, 38 per cent; the average yield 1.5 bushels per acre, and \$6 to \$8 is generally thought the price at which farmers will sell freely. Following are some features in detail on threshing returns:

Ohio and Indiana give 40 per cent completed, Michigan slightly less. Scattering reports indicate that in a few places more than half of the threshing has been done, but the number of these is surprisingly small. There is a good deal of complaint of the wet weather having retarded the work. At some points in Michigan the hulling has only just begun. Wisconsin average one-fourth completed.

While some outturns of 2 to 3 bushels per acre are recorded, and a few as high as 4 bushels, the average in each of the three neighboring states is 1½ bushels, Ohio and Michigan being somewhat above and Indiana slightly below the general average. Reports from Wisconsin are much larger, averaging over 3½ bushels, and running in one case to 5 bushels.

The quality of Michigan seed is given as good in 90 per cent of cases; Ohio in 60 per cent of reports, and in half of Indiana returns, the balance being fair, with a few exceptions where complaint of poor quality is made. Wisconsin seed is not only abundant in quantity, but of uniform good quality.

NEW MINNESOTA SEED LAW

To facilitate the requirements of the new seed labeling law in Minnesota which went into effect on July 1, the botany division of the Agricultural College, University of Minnesota, has prepared plans for the establishment of a large laboratory for the free testing of all seeds submitted for examination. Professor E. M. Freeman, head of the division, will supervise the work, and the laboratory will be in charge of Professor W. L. Oswald. The senior members of the botany classes will be employed by the state to assist in the work of seed testing.

Under the provisions of the new law, every package of seed that is sold in the state must bear a tag showing purity and germination tests, thus enabling the buyer to know just what he is getting. Any citizen will be privileged to submit seeds to the laboratory for testing.

"This law will insure the reputation of Minnesota seed," said Professor Freeman recently, "if the farmers familiarize themselves with the labels, so that they can read them properly. Quack, sow thistle, Canadian thistle and dodder thistle, four of the most expensive of the weed pests that are now bothering the farmers of the state, will be identified under the new law. There will be no possibility of selling seed containing a percentage of these weeds without it being so stated on the label. Seeds that are imported from outside of the state, or from Europe, will also be identified in the same way."

COURT DECISIONS

[Prepared especially for the "American Grain Trade" by J. L. Rosenberger of the Chicago Bar.]

PROMPTNESS OF ACTION REQUIRED OF DIS-SATISFIED BUYERS

Where goods are tendered on a contract with express or implied warranty, the buyer must within a reasonable time notify the seller that they are not accepted at all on such contract, or be precluded from the right to rescind the contract for a breach of the warranty, and he must notify the seller that they are not accepted as satisfying the contract, or be precluded from the right to defend against an action for the purchase price on the ground that such goods do not satisfy the requirements of the agreement, says the Supreme Court of Wisconsin in *Oscar Smith & Sons Company vs. Company*, (137 Northwestern Reporter, 966).

J. W. Boling, grain dealer, of Fresno, Cal., was arrested recently on a charge of passing forged checks.

K. K. Liquin, proprietor of the elevator at Wilsall, Mont., has been charged with using short weight scales.

Charged with having stolen \$500 worth of grain within a short period, Jesse Bankston, a negro employee of Howell Fain at Atlanta, Ga., and a confederate were placed under arrest recently.

Upon application for confirmation of the 10 per cent compromise offered by the Alexander Seed Company, a bankrupt firm of Augusta, Ga., and accepted by the majority of creditors, a hearing was called by the court on Sept. 16.

Henry Arends, formerly agent for the Atlas Elevator Company at Zell, S. D., has pleaded guilty to a crime of embezzlement, his defalcations amounting to over \$1,300, it is said, and was sentenced to the state penitentiary for one year.

John Martin, a wealthy grain dealer of Zanesville, Ohio, was recently placed under arrest on a charge of arson. Mr. Martin's barn lately burned with a loss of \$1,200, and he is said to have ignited the structure while in a fit of rage against his wife.

George S. Mathieson has filed suit against the members of the council of the Grain Exchange at Winnipeg, Man., and the case gives promise of some very interesting developments. The plaintiff is a member of the Exchange, but is employed by MacLennan Bros., Ltd., an incorporated grain firm not

"No one will be allowed to sell seed corn unless the tag accompanying the seed tells the county in which it was raised. This is done to protect the corn raiser in the northern part of the state, who cannot use seed to advantage that has been grown in the southern sections. We have been testing from 1,500 to 2,000 samples of seed each year for the last three years, but in the future we will be required to examine packages from farmers and seed houses in all parts of the state."

CLOVER AND TIMOTHY SEED

C. A. King & Co., Toledo, say of clover and timothy seed, October 4: "Farmers are dictators. When will they sell more freely? They have been busy. They will soon have more time. Prices are still low but they have advanced a dollar and a half from the lowest. Wet weather has made the October shorts anxious. Some are trying to ship in. It looks now as if we have had our lowest prices for the season but not our highest. Prices may soon attract a little foreign selling for December and March but not for October, as most of the crop abroad is not yet secured. Farmers realize that there is only one large crop of clover seed about every five years, and they will everywhere carry over seed enough for several seasons. They have the money and the disposition. They have paid fancy prices for several seasons. Their land needs fertilizing. Demand will be largest in years. Many country bulls have been buying near home and paying more than Toledo prices. Now that prices have advanced they may hesitate. This may increase terminal receipts. A little will come to fill October but otherwise there is no sign of any general increase. Speculative demand has not been general but offerings have been limited. Some six-dollar bears have become bullish. Short interest is still large. Realize on extreme bulges. Anticipate your spring wants on the breaks. You can realize here any day. Futures here have a speculative value which low grades in the country have not."

connected with the Grain Exchange. The case is the outgrowth of a penalty of \$500 assessed the plaintiff for an alleged transaction of his firm.

In the case of Jens Jensen against the Shella-barger Elevator Company at Gibson City, Ill., concerning grain in the elevator at the time it burned in 1911, a verdict was rendered in favor of the plaintiff and damages amounting to \$1,554.71 were assessed.

An order has been issued by the Federal Court for the sale of the stock and machinery of the Chicago Grain and Feed Company, Chicago, bankrupts, and the sale of \$20,000 worth of real estate will be made later. An involuntary petition alleging indebtedness of \$90,000 was filed some weeks ago.

State officials of Missouri recently requested the assistant prosecuting attorney at St. Louis, Mo., to issue warrants for the Schreiner Grain Company and the Bert H. Lang Company, members of the Merchants' Exchange, for violation of the 1907 future delivery law, but the request was refused.

The Minneapolis Seed Company, Minneapolis, Minn., has brought suit against A. C. Croft, Wm. Edwards, Charles Edwards and James Craig, of Moulton, Iowa, charging conspiracy in burning the A. C. Croft Company's elevator and seed house on Aug. 18, 1911. It is charged that the Minneapolis company furnished the Moulton company with money to buy timothy seed and the contract was not fulfilled.

William B. Mohler, grain dealer, has brought suit against the Minneapolis Chamber of Commerce and the E. L. Welch Company, of Minneapolis, the case being the outgrowth of an alleged debt to the latter company. Mr. Mohler's membership in the Chamber of Commerce was offered for sale by that body on Sept. 17, but the court issued a temporary injunction against the sale until the suit concerning the annulment of the debt is decided.

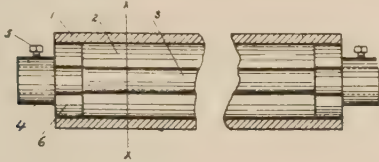
Indictments returned more than a year ago were recently made public at Sioux City, Iowa, involving A. A. Truax, of Mitchell, S. D.; M. T. Shepherdson, of the state of Washington, and M. King, of Sioux City, in a charge of embezzlement. The case concerns the affairs of the Shepherdson Grain Company, now out of active operation. It is alleged that the three men, as directors of the company after its reorganization in 1909, appropriated the funds of the reorganized company to liquidate the debts of the original partnership, known under the same name but not incorporated. The amount of the appropriation is given as \$160,000.

GRAIN TRADE PATENTS

Issued on September 9, 1913

Roll for Bean-picking Machines.—Charles E. Smith, Saginaw, Mich., assignor of one-fourth to Gustave R. Meyer, Saginaw, Mich. Filed Nov. 1, 1912. No. 1,072,665. See cut.

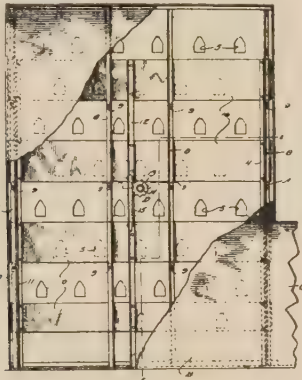
Claim.—In a roll of the class described, the combination with a shaft, of an outer shell of relatively hard resilient material, a plurality of longitudinally disposed ribs of softer material, each of said ribs extending



lengthwise the shaft and having a thickened outer edge formed to merge into the material of the shell, said ribs extending radially inward from said shell and formed integral therewith, the inner ends of adjacent ribs being unconnected and spaced apart and adapted to slidably engage said shaft on their inner ends, for the purposes set forth.

Duct-control Mechanism for Grain-driers.—Fulton R. Morris, Milwaukee, Wis., assignor to Morris Grain Drier Company, Milwaukee, Wis., a corporation of Wisconsin. Filed Nov. 19, 1912. No. 1,072,762. See cut.

Claim.—The combination with a drier including a chamber having oppositely disposed walls and ducts, pervious to fluid, passing transversely through the chamber and open at the outer faces of said walls, of



a shutter structure at the outer face of each of the said walls and adapted to cover the openings of certain of said ducts, the shutter structure at one wall being arranged relative to the shutter structure at the outer wall, so that each duct has but one opening throttled by such shutter structures, a shaft extending transversely of the said walls of said chamber, and mechanism operable from said shaft and operatively connected with said shutter structures to simultaneously actuate the same to throttle openings of said ducts previously unthrottled, and to unthrottle the said openings of said ducts previously throttled.

Scale.—Frank S. Hebden, Peoria, Ill. Filed Jan. 2, 1912. No. 1,073,072.

Screen or Separator.—Thomas Joseph Sturtevant, Wellesley, Mass., assignor to Sturtevant Mill Company, a corporation of Maine. Filed Jan. 6, 1913. No. 1,072,879.

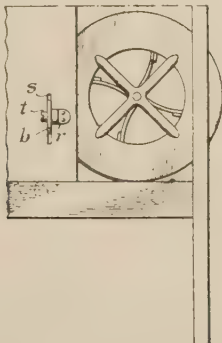
Issued on September 16, 1913

Grain-car Door.—Thomas Sills, Westmount, Quebec, Canada. Filed Apr. 2, 1912. No. 1,073,296.

Grain-door.—Joseph Woods, Herbert, Saskatchewan, Canada. Filed June 15, 1911. No. 1,073,202.

Grain-separating Machine.—Morries Weaver, Jonestown borough, Pa., assignor to John T. Buckwalter, Lancaster, Pa. Filed Jan. 20, 1911; renewed Feb. 18, 1913. No. 1,073,451. See cut.

Claim.—In a grain separator, the combination with a cylindrical blast fan having air-receiving openings at the lateral ends thereof and a transverse discharge opening extending from end to end of the fan formed in



the inclosing casing thereof, of a blast-regulating device comprising two plates movably pivoted to the central part of said casing adjacent said discharge opening and adapted to construct the same, slots in the side walls of the separator through which said plates extend, and means whereby said plates may be adjusted, the one independently from the other from the outside of the

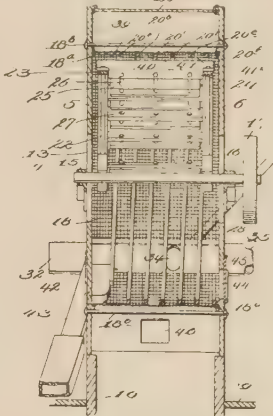
separator, so that one side of said discharge opening may be restricted independently of the other.

Issued on September 23, 1913

Grain-door.—Peter James Hansen, Lansford, N. D. Filed June 7, 1912. No. 1,073,981.

Grain Scourer or Cleaner.—Frederick Horstmann, Ashland, Ky., assignor of one-fourth to W. A. Hood, Ashland, Ky. Filed Mar. 8, 1913. No. 1,074,052. See cut.

Claim.—In a grain scourer or cleaner of the class specified, the combination of a casing, a fixed foraminous cylinder within the casing, a fan rotating



within the cylinder, spirally arranged ribs extending around the interior of the cylinder and forming longitudinally unobstructed spiral grain channels which cause the grain to move laterally of the scourer from the point of inlet toward the outlet, a dust chamber being formed between the outer portion of the cylinder and the casing and having a bottom outlet, and means for feeding grain into the interior of the cylinder at different points.

Issued on September 30, 1913

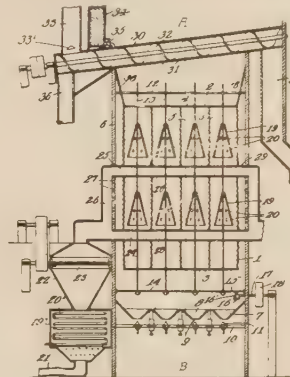
Grain-car Door.—Andrew G. Olson and John A. Dals, Elbow Lake, Minn. Filed Jan. 29, 1913. No. 1,074,193.

Combined Tray-conveyor and Spiral Chute.—Martin C. Schwab, Chicago, Ill., assignor to Gravity Conveyor Company, a corporation of New York. Filed June 11, 1909. No. 1,074,387.

Issued on October 7, 1913

Grain-drier.—Peter Provost, Milwaukee, Wis. Filed Dec. 27, 1912. No. 1,074,977. See cut.

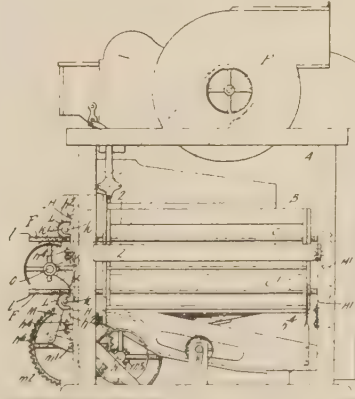
Claim.—A grain drier including upwardly extending flues, hollow agitating means within the flues, rods connecting said means and extending within the flues and



beyond one end thereof, crank shafts connected to the rods, and means for intermittently actuating the shafts to reciprocate the rods and agitating means.

Cleaner for Separator-screens.—Theodore F. Morse, Silver Creek, N. Y., assignor to Huntley Manufacturing Company, Silver Creek, N. Y. Filed Dec. 26, 1911; renewed Mar. 5, 1913. No. 1,074,970. See cut.

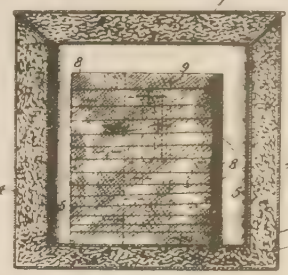
Claim.—In a separator having oppositely inclined screens, the combination of a cleaner for the screens comprising a plurality of brushes for each screen, a



supporting shaft arranged centrally between the oppositely inclined screens, means for pivotally securing the brushes for the opposite screens to said shaft to swing toward and from the screens, and means for reciprocating said shaft, substantially as set forth.

Seed-tester.—Willis Weaver, near Sealy, Texas. Filed Apr. 3, 1913. No. 1,074,826. See cut.

Claim.—A sample-containing element for seed-testers comprising a strip of absorbent material having a con-



tinuous central portion adapted to have samples placed thereon and side flaps bearing identifying characters adapted to be folded over the samples.

SOME POINTS ABOUT BROOMCORN

Broomcorn is now grown in practically all sections of the United States, but probably finds its nearest ideal home in the states of Oklahoma, Kansas, Texas and New Mexico. Of these states, Oklahoma is the leader, sometimes producing over forty thousand tons in a single year. In the Middle western states Illinois and Missouri produce large quantities of this crop.

Climatic conditions determine to a large extent whether or not a good crop of broomcorn can be grown in a certain locality, according to *The Country Gentleman*. The soil conditions are suitable in nearly all sections, as land that will produce good corn will also produce good broomcorn. The growing season is also sufficiently long in those sections where a corn crop will mature, as it takes less time for the maturity of a broomcorn crop. The plant is sub-tropical, however, and does best in a warm, sunny climate where there is sufficient rain during the early part of the season to produce a strong, rapid growth, and then warm, dry weather at harvest time so that the brush will retain its fresh green color. In localities where rain falls to any considerable extent during the harvesting season it cannot be profitably grown.

Broomcorn belongs to the grass family and is closely related to kaffir, milo, sorghum and similar plants. It differs from these plants in having longer panicles for the seeds and with a stronger and straighter straw. This difference has been brought about by the selection of those plants having the long, straight panicles until we have the plant as we know it today. The chief value of the plant lies in the head or brush, as it is commonly called. This brush is used in the manufacture of the various kinds of brooms. The seed and stalks are usually destroyed as useless by-products. The seeding operation, which is an important one, is the process of cleaning all seed from the brush. This seeding may be done when the brush is hauled from the field immediately after being cut and before it is cured, but the most desirable method is to wait until the brush is dry enough to bale, and then perform the seeding and baling operations at the same time.

The essential part of a broomcorn seeder is a cylinder which will knock the seed from the brush, and the power necessary to run it. Many of these cylinders are homemade and are run by horse-power. The larger and better-equipped machines, however, are factory-made and are run either by gasoline or steam-power. The baler consists of a box-like arrangement in which the brush is placed in layers with the butts exposed on the ends. The pressing is done with the same power that runs the seeder. The bales weigh from two hundred to three hundred pounds each.

The seed when knocked from the brush is in most cases piled to one side and allowed to rot. When thoroughly cured and kept in a dry place, however, it makes a very good feed for horses and mules and for the different kinds of poultry. When the feeding value of this now wasted by-product becomes more generally known we may expect it to assume its rightful place among other feeds.

Broomcorn is classed on the market as choice whisk brush, used in the manufacture of whisk brooms; choice green hurl, used on the outside of house and warehouse brooms; choice green self-working, used in both inside and outside work; and the variations of these classes, such as medium hurl, medium self-working, common self-working. Another classification usually made is called good inside covers. This class of brush is used altogether on the inside of the broom and brings the lowest price on the market. Brush suitable for whisk brooms commands the highest price, but as the demand is very light few growers pay any attention to its production. The prices paid for the other grades vary with their place in the classification given above, the best grade of hurl commanding a price next to the whisk brush.

CROP REPORTS

The last Indiana crop report shows 14,144,445 bushels of wheat raised from 1,477,453 acres of land and 172,290,495 bushels of corn raised from 4,452,369 acres planted.

Cable advices from Buenos Aires to Slaughter said that nothing had been decided as yet on removing import duties on grain, but that the matter was under consideration by the government.

A leading Tennessee paper, discussing the condition of the crops in that state, says: "From reports had from different sections it is quite certain the

bushels. The total is 475,967,000 bushels, an increase of more than 42,000,000 bushels over last year."

THE GOVERNMENT ESTIMATE

The Crop Reporting Board of the Bureau of Statistics (Bureau of Agricultural Forecasts) of the United States Department of Agriculture estimates, on October 9, 1913, from the reports of the correspondents and agents of the Bureau, as follows: For the United States:

Crops.	For the United States.				Condition Oct. 1, or Condition at time of harvest.		10- Sept. 1, P. ct.		Acres, 1913—	
	1913.	1912.	yr. av.	1913.	of 1912.	1912.	Acres.			
Corn	65.3	82.2	80.6	65.1	99.8	106,884,000				
Buckwheat ..	65.9	89.2	84.2	75.4	100.0	841,000				
Flax	74.7	83.8	78.5	74.9	85.1	2,425,000				
Rice	80.3	89.2	87.5	88.0	111.0	824,100				

The yields indicated by the condition of crops on October 1, 1913, or at time of harvest, and the final yields in preceding years, for comparison, follow:

Crops.	Yield per acre.		Total production in millions of bushels.		Increase (+) or decrease (-) in production during Sept.	
	1913.* final.	1912.	1913.* final.	1912.	Per cent.	
Corn	22.2	22.9	2,373	3,125	+0.9	
Buckwheat ..	16.5	29.2	1,131	1,131		
Flax	8.7	9.8	1,131	1,131		
Rice	30.9	34.7	1,131	1,131		

*Interpreted from condition reports. Preliminary estimates of production have been made as follows:

Crops.	Yield per acre.		Thousand bushels—		1913.	
	1913.	1912.	1913.	1912.	1913.	1912.
Spring wheat..	13.0	17.2	13.3	242,714	330,348	150,682
Winter wheat..	16.5	15.1	15.2	19,514	29,011	40,000
All wheat.....	15.2	15.9	14.5	25,428	359,259	190,682
Oats	23.0	23.4	22.7	1,122,139	1,418,337	841,298
Barley	23.9	29.7	24.5	173,390	222,821	180,244
Rye	16.3	16.5	16.2	34,789	35,664	33,119
Hay, tame.....	1.31	1.47	1.38	63,460	72,691	54,916

The quality of spring wheat is 92.0 per cent, as compared with a ten-year average of 86.9; oats, 89.1 per cent, compared with a ten-year average of 87.1; barley, 86.4 per cent, compared with a ten-year average of 87.0. Details for important States follow:

States.	Per acre.		Total (000 omitted).		Quality.	
	1913.	1912.	1913.	1912.	1913.	1912.
Iowa	34.5	44.2	168,326	217,818	94	95
Illinois	23.8	43.6	102,435	182,736	78	91
Minnesota ..	37.8	41.7	112,531	122,932	93	94
Wisconsin ..	35.5	37.3	83,768	84,746	95	87
Nebraska ..	26.5	24.4	60,288	55,510	89	89
North Dakota	25.7	41.4	57,928	95,220	89	95
Kansas	19.5	32.0	36,894	55,040	80	91
Ohio	30.2	44.0	55,055	93,280	89	90
Indiana	21.4	40.1	37,471	79,799	77	80
South Dakota	26.5	33.8	42,294	52,390	88	91
Michigan ..	30.0	34.9	45,450	51,826	91	82
New York ..	33.5	30.8	43,114	36,714	94	83
Missouri ..	21.2	33.0	26,246	37,125	78	94
Pennsylvania	31.0	33.1	35,774	36,377	90	88

United States. 29.3 37.4 1,122,139 1,418,337 89.1 91.0

States.	Per acre.		Total (000 omitted).		Quality.	
	1913.	1912.	1913.	1912.	1913.	1912.
North Dakota	10.5	18.0	79,695	143,829	90	86
Minnesota ..	13.2	15.5	67,959	87,098	92	86
South Dakota	9.0	14.2	33,075	52,185	90	88
Washington ..	19.0	20.4	23,161	26,459	90	91

United States. 13.0 17.2 242,714 330,348 92.0 88.7

States.	Per cent of U. S. acreage.		Condition October 1, 1913.		Condition 10-yr. av. 1913.	
	1913.	1912.	1913.	1912.	1913.	1912.
Illinois	9.9	61	86	84	62	
Iowa	9.3	77	91	82	76	
Nebraska ..	7.1	39	77	78	37	
Kansas	6.9	10	72	69	10	
Missouri ..	6.9	44	84	80	41	
Texas	6.6	78	75	73	78	
Oklahoma ..	4.8	38	63	67	39	
Indiana ..	4.6	80	89	85	81	
Georgia	3.8	87	74	86	87	
Ohio	3.7	80	90	84	81	
Kentucky ..	3.4	60	89	86	59	
Tennessee ..	3.1	66	82	85	65	
Alabama ..	3.0	78	80	86	78	
Mississippi ..	3.0	81	80	86	81	
North Carolina	2.6	85	75	84	87	
South Dakota	2.5	79	84	84	78	
Arkansas ..	2.3	70	78	80	71	
Minnesota ..	2.2	99	84	83	95	
South Carolina	1.9	85	75	82	86	
Virginia	1.9	85	73	85	85	
Louisiana ..	1.8	84	80	82	85	
Michigan ..	1.5	80	82	82	80	
Wisconsin ..	1.5	94	83	84	94	
Pennsylvania	1.4	78	85	84	81	

United States. 100.0 65.3 82.2 80.6 65.1

States.	Per acre.		Total (000 omitted).		Quality.	
	1913.	1912.	1913.	1912.	1913.	1912.
North Dakota	42.1	74	80	76	73	
South Dakota	20.4	70	81	83	68	
Montana	18.0	80	95	86	84	
Minnesota ..	14.7	78	86	82	81	

United States. 100.0 74.7 83.8 78.5 74.9

Chamber of Commerce men saw indication that North Dakota and Minnesota farmers are holding back wheat and that Canadian farmers are rushing it to market, when the posted figures today showed 2,413 cars received over Sunday in Winnipeg, 717 cars in Minneapolis and 946 cars in Duluth. The Minneapolis receipts compared with 833 cars last Monday and 989 a year ago, and the Duluth receipts

compared with 970 and 1,294. Winnipeg had the greatest total of record, the 2,413 cars comparing with 833 last Monday and 1,640 a year ago.

The total area under corn crops, green crops, flax and hay in Ireland in 1851 amounted to 5,588,951 acres and in 1912 to 4,830,187 acres, a decrease of 1,028,764 acres. This represents approximately the increase in the area of pasture during the same period. Of the total area of Ireland about 1.5 per



From the "Winnipeg Telegram"
HIS 1911 HAIR CUT

cent is under woods, as compared with 5.3 per cent in England, 4.5 per cent in Scotland, and 3.9 per cent in Wales.

World's available supply of wheat, as compiled by Bradstreet's, increased 15,017,000 bushels last week, compared with 10,936,000 bushels last year. Stocks east of the Rockies increased 2,826,000 bushels against 907,000 bushels last year, while in Canada there was an increase of 8,344,000 bushels against 4,842,000 bushels last year. Supplies afloat for and in Europe increased 3,400,000 bushels against 5,000,000 bushels last year. Corn increased 729,000 bushels against a decrease of 41,000 bushels



From the "St. Paul Dispatch"

NORTHWEST FARMER: "IT'S ALL RIGHT, OLD GIRL, BUT LET ME GET MY BREATH"

crop was not damaged by dry weather as much as at first thought, and a much larger yield will be realized than anticipated."

Australian wheat crop this year is estimated by Broomhall's Sydney agent at 100,000,000 bushels, or 11,000,000 bushels more than last year. Recent rains caused a marked improvement in prospects.

Reports from southeastern Missouri say that corn is molding in the shock and rotting owing to continued mild and wet weather, and that the percentage of good corn will be small. Columbia, Mo.,



From the "St. Louis Republic"

THE FARMER STILL WINS

wired J. E. Bennett that huskings show up bad, condition being poor. There were also a few complaints from central Illinois.

According to figures compiled by the State Board of Agriculture, the farmers of Nebraska raised 90,299,336 bushels of corn in 1913. Figured at 70 cents a bushel, the crop is worth \$63,209,558. In 1912 the production was estimated at 164,376,786 bushels, worth \$96,626,071. So the 1913 crop, because of the higher price, is worth about one-third less than the crop of 1912.

A Canadian correspondent of the Wall Street Journal makes the latest summary of crop estimates in the north as follows: "Canada's western agricultural provinces, Manitoba, Alberta and Saskatchewan, are harvesting one of the largest, if not the largest, crops in their history. Their total yield is now estimated as follows: Spring wheat, 188,018,000 bushels; oats, 244,125,000 bushels; barley, 28,156,000 bushels; rye, 612,000 bushels, and flax, 15,056,000

YOU

are interested in

Cincinnati

—as

it is the best cash market in the country for Hay and Grain, but you must

Consign
to get best results.

Our business is strictly commission and we guarantee satisfactory service.

A copy of actual transactions in the Cincinnati market will be sent daily upon request.

The Fitzgerald Bros. Co.

Members the Cincinnati Chamber of Commerce

CINCINNATI - - OHIO

last year, while oats increased 1,137,000 bushels, compared with a decrease of 13,000 bushels last year.

Wheat shipped from Portland, Ore., during September, amounting to 2,078,033 bushels, was 492,038 bushels more than was floated during the same time last year, and for the season to date the shipments have reached 3,218,501 bushels, which is 928,072 bushels more than was sent away during July, August and September of 1912. Total flour shipments were 132,097 barrels, a gain over last September of 22,444 barrels, and for the first three months of the cereal period 70,590 barrels have been shipped in excess of the last corresponding period.

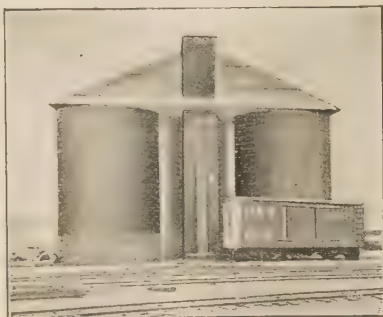
Dr. M. N. Merritt, of the Illinois Agricultural Experiment Station at Galesburg, was a recent visitor in Iowa. He was on a tour of the Western States to ascertain the extent of damage done to the corn in Kansas, Nebraska, Iowa and Missouri. Speaking of conditions in Iowa, Dr. Merritt said: "Iowa will have a far better corn crop this year than Illinois or Ohio, and that means that it will have the heaviest acreage yield of any state in the corn belt. Much of the corn in the extreme southern part of Iowa will not yield more than 25 bushels to the acre, but the recent heavy rains in the northern portion, and especially in the northeast section of the state, will produce a bumper crop, regardless of whether or not there is more rain. Iowa corn is 'made' now."

HUDSON SILOS

For Storage of Grain and Seed

Most economical in material and cost of erection.

Drawings and specifications of complete plants furnished.



F. E. HUDSON & SONS
ELLISBURG, N. Y.
Manufacturers

LEONARD ENGINEERING CO., Representatives,
20 Vesey Street, New York City

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

ELEVATORS AND MILLS

A FIRST-CLASS OPPORTUNITY

I have a feed mill with well established brands of poultry foods and also a centrally located seed and poultry supply store in Los Angeles at low rent. Will sell all or part interest, or either the store or mill end of the business, or part interest in either, including the real property or not, as desired. Inventory: Store end, \$8,000; mill and warehouse, \$10,000; real property, mill and warehouse, \$16,000; mortgage, \$3,500, making total \$30,500. I have other business making more than I can attend to. A good man who knows the business will stay with each end of the business, if desired. Correspondence solicited. T. S. T., 116-118 East 7th St., Los Angeles, Cal.

ELEVATORS AND MILLS

HOW TO SELL YOUR ELEVATOR

If you wish to sell your elevator promptly and quietly, write me, giving all the information. Must be worth the money. JAMES M. MAGUIRE, Campus, Ill.

FOR SALE OR TRADE

Two elevators and coal sheds for real estate. Located at Frederick and Groton, S. D. Handled 100,000 bushels each last year. LOCK BOX 86, Groton, S. D.

FOR SALE

Elevator, grain and coal business in northern Illinois town. Handles 350,000 bushels grain and 1,200 tons coal annually. For particulars, address ILLINOIS, Box 10, care "American Elevator and Grain Trade," Chicago, Ill.

AT A BIG BARGAIN—TEXARKANA MILL AND ELEVATOR FOR SALE

The plant is situated on East Broad St., at the corner of College Hill Road in Texarkana, Ark. There is a railroad siding on the north side along the plant, also a siding on the south side of the plant; ample track facilities for storing cars. The main building is brick for the first story, the balance is galvanized iron. The floor space of the main building is about 40x100 to 110 feet. The main building contains three Nordyke & Marmon Meal Mills; one Willford Three-Roller Chop Mill; one No. 6 Barnard & Leas Oat Clipper; one Barnard & Leas Corn Separator; one Nordyke & Marmon Double Cylinder Meal Drier; one Barnard & Leas Bran Packer; two Barnard & Leas Meal Packers; one Howe Hopper Scale, 100,000 bushels' capacity; two Howe Platform Scales; one Fairbanks Platform Scale; one Fairbanks Scale on rollers; one Power Grain Shovel; one Barnard & Leas Bran Shaker; one No. 4 Barnard & Leas Smutter for corn; one 30x72 meal shaker; three Barnard & Leas Round Scalpers; one No. 7 Cyclone Dust Collector. Sixteen large bins holding about 4,000 to 5,000 bushels each of grain, 13 small bins holding from 1,000 to 1,500 bushels each. All bins are cribbed, hopped bottoms with spud and slide, elevator legs, shafts, pulleys, belts to complete same.

Engine room adjoining: One 14x15 Corliss steam engine, fly-wheel 10-foot diameter; one steam boiler 60 inches by 16 feet, complete with dome set in brick, arranged for natural gas, with four Quilan Gas Burners; one Westinghouse K. W. generator slate switchboard; one Duplex Boiler Feed Pump; one water tube, feed water heater; one oil separator.

One warehouse adjoining main building, about 60x100, two walls of which are brick, two walls iron clad, composition roof.

Adjoining above warehouse: One brick warehouse, about 30x100, composition roof, cement floor, platforms along the north side along the building all the way and platform in rear of main building.

Water supply for boiler derived from well, also connected with city water plant, entire elevator building piped for fire protection with two-inch hose openings connected with two-inch hose on each floor. Basement under main building, 40x100 to 110 feet.

Plant was built eight years ago at a cost of \$46,000; if sold soon will take \$11,000 net cash. If you are interested in such a plant, it will pay you to investigate the above. For further particulars, write J. E. MUGGE, San Antonio, Texas.

Edward P. McKenna

John A. Rodgers

McKENNA & RODGERS

COMMISSION MERCHANTS

Grain and Provisions, Shippers of Corn and Oats

61 Board of Trade, CHICAGO

Consignments given
Special Attention

Phone
Harrison 7228

Orders in Futures
carefully executed

ELEVATORS AND MILLS

ELEVATORS FOR SALE

Have a nice lot to select from at prices from \$2,000 up. Write and let me know how much you wish to pay. Am sure I can suit. JAMES M. MAGUIRE, Campus, Ill.

FOR SALE

An A-1 elevator, fully equipped, doing big business. Located at splendid station, 12 miles from Rockford, Ill.; no competition. Will sell right on easy terms. For price and terms, address BOX 164, Independence, Iowa.

FOR SALE

Elevator in Omaha, capacity 55,000 bushels. Plant practically new. Three hundred feet trackage on B. & M.; ground, 66x300. Price, \$16,000. Complete equipment. For further particulars, address BEMIS-CARLBERG CO., 310-312 Brandeis Theater Bldg., Omaha, Neb.

FINE OPPORTUNITY TO ACQUIRE A LARGE AND PROFITABLE BUSINESS.

The Joliet Plant of the Truby Grain Co. for sale, consisting of modern grain elevator, flour jobbing storage, retail coal sheds, hay sheds, etc. CHAS. V. BARR, Trustee, Center & Wallace Sts., Joliet, Ill.

FOR SALE OR RENT

Terminal elevator at Oklahoma City, Okla., with large storage capacity. Equipped with 100-ton track scale, 50-ton hopper scale, wagon and platform scales, corn sheller, clipper, cleaners and feed rolls. Motive power: 125-horsepower, one 20-horsepower, one 15-horsepower, one 7-horsepower electric motors. One 40-horsepower boiler to operate Hess Drier. This elevator is on private property with trackage on both sides, and has free switching to four trunk lines. This affords a splendid opportunity for a live grain firm to acquire and operate an elevator in a live and rapidly growing city, the gateway to the South. Would take good land in part payment. If interested, write J. C. PEARSON, Marshall, Okla.

MACHINERY

FOR SALE CHEAP

Guaranteed 25-horsepower good as new two-cylinder Nash Engine. Cost \$1,000. Price for quick sale \$375. BADGER MOTOR CO., Milwaukee, Wis.

FOR SALE.

One No. 37 Clipper Bean Cleaner in good condition. Selling to make room for larger cleaner, same make. RELIANCE MILLING CO., Vassar, Mich.

FOR SALE

A 75-horsepower, 4-valve Atlas Engine; 125-horsepower boiler, also Atlas make, smokestack and brick building included. All are in first-class condition. Price \$1,500. W. H. LEWIS, Alma, Nebr.

FOR SALE CHEAP

One 35-horsepower Smith Gas Producer.
One 30-horsepower Fort Wayne Foundry & Machine Co., Horizontal Gas Engine.
Complete with muffler and gas expansion reservoir for attachment to artificial gas line, if desired. Operated about five years with perfect success. ECONOMY GLOVE COMPANY, Fort Wayne, Ind.

10

VITAL ISSUES

We invite requests for the 10 issues of the Wagner Twice Monthly letter that cover the April to August crop raising season. Ten issues sent on request. Will contain crop reports from 700 correspondents and understandable statistics bearing on future market changes. Send names of your friends.

E. W. WAGNER & CO., Board of Trade
CHICAGO
ESTABLISHED 1/2 CENTURY

MACHINERY**WILL SELL CHEAP.**

Fairbanks-Morse Gasoline Engine, 22-horsepower, with magneto, in good running order. W. E. BARBRE, Taylorville, Ill.

FOR SALE

One No. 6 Second-Hand Monitor Seed Cleaner.
One Second-Hand Fairbanks Platform Scale.

For particulars, write S. W. FLOWER & CO., Toledo, Ohio.

FOR SALE

Machinery and equipment complete of 1,500-barrel mill, Nordyke & Marmon Sifter System; is all nearly new, having been used only two years. Will sell all together, or any part of same. The equipment includes 150-horsepower Hamilton Corliss Engine and one 1,000-horsepower Reynolds Corliss Engine, vertical. HARTZ MACHINERY CO., 607 Arch St., Philadelphia, Pa.

**Miscellaneous
Notices**

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

HAY AND GRAIN WANTED.

All grades of wheat, corn, oats, hay, straw, milling buckwheat, bran, middlings, reddog, potatoes, cabbage, onions and apples. C. T. HAMILTON, New Castle, Pa.

FOR SALE CHEAP

One thousand four hundred acres in the beautiful Stanley country in Taylor County, Wis. Rich, new clay loam. One-fourth to four miles from Lusk and Gilman. BOX 38, Dyersville, Iowa

AN EXCELLENT OPPORTUNITY.

A well-established wholesale and jobbing grain, hay and mill products business for sale, and large warehouse for rent, on track in San Antonio, Tex. For particulars, address HARRY LANDA, New Braunfels, Texas.

WISCONSIN LANDS FOR SALE

Can furnish retired business men, clerks, bookkeepers and others fine farms, five acres and up to 1,000, near railroad stations and good markets, cheaply and on easy payments. Write for particulars to STEPHENSON LAND & LUMBER CO., Oconto, Wis.

BAGS**WANTED**

Second-hand bags and burlap. We pay highest cash prices. FULTON BAG & COTTON MILLS, Dept. D., St. Louis, Mo.; New York, N. Y.; Dallas, Tex.; Atlanta, Ga.; New Orleans, La. Write to the house nearest you for prices.

FOR SALE—BURLAP BAGS OF EVERY KIND

New or second-hand, plain or printed with your brand; seamless cotton grain bags; sample bags; burlap, cotton, sheeting, or paper for car lining, etc.

Wanted: Second-hand bags; best prices paid. WILLIAM ROSS & CO., 409 N. Peoria St., Chicago, Ill.

PATENTS

Secure your own patents. I do the work. You get the patent.

RICHARD J. JACKER
Patent and Mechanical Expert

Established 1892

Monadnock Block, Chicago

**Grain and
Seeds****FLOUR AND MILL FEEDS**

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products. ANSTED & BURK CO., Springfield, Ohio.

**N. L. WILLET
SEED CO.**

AUGUSTA, GEORGIA

*Only the Best***Seeds, Feeds and
Poultry Supplies****Workmen's Compensation or
Employer Liability Insurance****Protects you from**

liability imposed upon you by the Illinois Workmen's Compensation Law. Write for rates and information.

BALSLEY BROS.
GENERAL INSURANCE AGENCY,
SPRINGFIELD, ILLINOIS

SEEDS WANTED

We solicit correspondence from shippers or dealers who are in position to offer us, or can secure for us, Timothy, Red, Alsike or Alfalfa, Clover, Millet, Red Top or other Field Seeds. Write us, with crop news, samples, and other information as to production of seed and approximate values in your section. Please refer to this advertisement.

ILLINOIS SEED CO.

1521-1535 Johnson St.

CHICAGO, ILL.

ROOFING AND SIDING**THE SYKES COMPANY**

930 West 19th Place, Chicago

MAKERS OF**FIREPROOF WINDOWS**

WE manufacture all gauges of corrugated iron, either painted or galvanized. We make Patent Cap Roofing, Roll Cap Roofing, "V" Crimped Roofing, Metal Ceilings, etc., etc.

We make a specialty of

**Corrugated Iron and
Metal Roofing
For Grain Elevators**

And take contracts either for material alone or job completed. Write us for prices. We can save you money.

GRAIN RECEIVERS**KANSAS CITY**

R. J. THRESHER, Pres. L. A. FULLER, Sec'y
THRESHER-FULLER GRAIN CO.

Grain Commission Merchants

CONSIGNMENTS SOLICITED

Grain Bought and Sold for Future Delivery

311-14 Board of Trade KANSAS CITY, Mo.

BALTIMORE**CHAS. ENGLAND & CO.**

RECEIVERS OF

GRAIN and HAY

308-310 Chamber of Commerce
BALTIMORE, MD.

SEEDS

Grain, Clover and Grass Seeds,
CHAS. E. PRUNTY,
7, 9 and 11 South Main St. SAINT LOUIS

The ALBERT DICKINSON COMPANY**GRASS SEEDS FIELD**

To Meet Demands Of

PURE SEED LAWS

Chicago

Minneapolis

GRAIN RECEIVERS

TOLEDO

When "Seedy"

Try

C. A. KING & CO.

Toledo Leads World

"SEND IT TO ZAHM"

THAT Consignment of Wheat, Oats, Corn or Seed.
 THAT Order for Futures—Toledo or Chicago.
 TOLEDO is the real market for Red Clover,
 Alsike and Timothy futures.

J. F. ZAHM & CO.

TOLEDO (Here since 1879) OHIO

ASK FOR OUR DAILY RED LETTER—FREE

JOHN WICKENHISER & CO.Wholesale Grain Dealers
TOLEDO, OHIO

We make track bids and quote delivered prices.
 Solicit consignments of Grain and Clover Seed.
 Members Toledo Produce Exchange and Chicago
 Board of Trade

The Oats Specialists

H. D. RADDATZ & CO.
GRAIN, SEEDS AND FUTURESAlways in the market to buy or sell. Ask for
our prices.Room 21, Produce Exchange
TOLEDO, OHIO

Oats Are Our Specialty

The Paddock Hodge Co.

Receivers—TOLEDO—Shippers

H. W. DE VORE & CO.

Wheat, Corn, Oats, Seeds

OUR unexcelled service is the result of twenty-six years ex-
 perience in the grain business in this market. SEND us
 your orders and orders in futures.

PRODUCE EXCHANGE, Toledo, Ohio
 Members Toledo-Chicago Exchanges.

W. A. RUNDELL CO.GRAIN, MILL FEED, SEEDS
RECEIVERS AND SHIPPERS

Solicit Your Consignments—Also Orders in Futures
 Specialty: No. 2 Milling Wheat

TOLEDO

OHIO

PITTSBURG

Sizing up Pittsburg Market?

THINK OF

H. G. MORGAN, "The Pittsburg
Hay Man"

727-729 Grain Exchange, Pittsburg, Pa.

HAY—Ear Corn, Oats—HAY

IN THE ONE SPOT 45 YEARS

Daniel McCaffrey's Sons Co.

Leading Hay and Grain Dealers

Pittsburg - - - Pennsylvania

D. G. Stewart & GeidelGRAIN, HAY and FEED
RYE A SPECIALTY

Office 1019 Liberty Street Pittsburg, Pa.
 Proprietors Iron City Grain Elevator. Capacity 300,000 bu.

W. F. Heck & CompanyRECEIVERS AND SHIPPERS IN CAR LOTS
MIXED CARS OUR SPECIALTY

Grain, Hay, Straw and Mill Feed

Room 727, Wabash Bldg., Pittsburgh, Pa.

Members: National Hay Association
 Grain Dealers' National Association
 Pittsburgh Grain and Flour Exchange
 Use Robinson's Code.

Samuel Walton Co.HAY GRAIN MILL FEED
Split Cars Corn and Oats a Specialty
CAR LOADS ONLY

No. 8 Wood Street, Pittsburgh, Pa.

Established 1879

J. W. SMITH & COMPANY
Pittsburgh, Pa.

Offer the very best facilities for the market-
 ing of corn and oats. We work interior
 points exclusively.

LANCASTER

DO YOU REALIZE

That country trade always pays you
 best in every way?

We work a large country business.
 See the point?

JONAS F. EBY & SON, LANCASTER, PA.

BUFFALO

L. S. CHURCHILL, President
G. W. BARTLETT, Treasurer**The Churchill Grain & Seed Co.**

Commission Orders Executed. Grain and Seed Bought and Sold.
 Offices: Buffalo, N. Y. Members
 Toledo, Ohio New York Produce Exchange
 Seed Warehouse: Toledo Produce Exchange
 Located at Toledo, Ohio Buffalo Corn Exchange

A. W. HAROLD
GRAIN**BARLEY A SPECIALTY**

717 Chamber of Commerce BUFFALO, N. Y.

H. T. BURNS,
PresidentBASIL BURNS,
Sec.-Treas.**Burns Grain Company**
BUFFALO, N. Y.

We invite correspondence and solicit consignments.

GET OUR BIDS AND MARKET REPORTS

L. E. HARMON, Pres.

GEO. F. BOOTH, Sec. and Treas.

BUFFALO CEREAL COMPANY
CEREAL MILLERS

Buyers of White Corn, Yellow Corn
 and White Oats.
 BUFFALO, N. Y.

INDIANAPOLIS

The Mutual Grain Company

GRAIN COMMISSION

618 Board of Trade, INDIANAPOLIS, IND.

Careful attention to all shipments

Merchants Hay & Grain Co.

INDIANAPOLIS, IND.

HAY, GRAIN, MILL FEED,
ALFALFA FEEDS

and All Kinds of Live Stock Feeds

Indiana's Largest Feed House

O. D. KENDRICK

BERT F. SLOAN

HAY AND GRAIN

Largest receivers and distributors of hay
 in the city. Consignments solicited; will
 buy to arrive or handle for your account.

KENDRICK & SLOAN,
 Board of Trade Bldg., INDIANAPOLIS, IND.

COMMISSION

Grain, Flour and Feed

C. A. SHOTWELL & CO.

Board of Trade, Indianapolis, Ind.

GRAIN RECEIVERS

NEW YORK CITY

L. W. FORBELL & CO.
Commission Merchants

342 Produce Exchange NEW YORK

Try us with consignments of oats and corn.
We are Specialists in these grains and
are strictly Commission Merchants.**BROOKLYN HAY & GRAIN CO.**
HAY, STRAW AND GRAIN
COMMISSION MERCHANTS

ON ALL MARKETS IN NEW YORK HARBOR

Office: Borough of Brooklyn, New York

Kensch & Schwartz Co., Incorporated
Produce Exchange, New York

CONSIGNMENTS SOLICITED

WHEAT—CORN—OATS

MEMBERS: NEW YORK PRODUCE EXCHANGE—CHICAGO BOARD OF
TRADE—GRAIN DEALERS' NATIONAL ASSOCIATION

PHILADELPHIA

L. F. MILLER & SONS,

Receivers and Shippers of

GRAIN, FEED, SEEDS, HAY, ETC.

OFFICE: 2931 N. BROAD ST., PHILADELPHIA, PA

CONSIGNMENTS SOLICITED. Special attention given to
the handling of CORN AND OATS.REFERENCES: { Manufacturers' National Bank, Philadelphia, Pa.
Union National Bank, Westminster, Md.**E. E. DELP GRAIN CO.**
GRAIN AND FEEDS

453 BOURSE PHILADELPHIA, PA

ELEVATOR, TRANSFER HOUSE AND MILLS:
BOURBON, INDIANA

DETROIT

A. S. DUMONT R. C. ROBERTS R. L. HUGHES

Dumont, Roberts & Co.

RECEIVERS GRAIN SHIPPERS

Chamber of Commerce
DETROIT, MICH.Merchants Exchange
DECATUR, ILL.

Consignments Solicited. Ask for our bids and quotations.

McLANE, SWIFT & COMPANY
(Formerly Battle Creek)
GRAIN MERCHANTSWith enlarged facilities for handling all kinds of
cash grain, we are in position to give both shippers
and receivers exceptional service.

WE INVITE YOUR BUSINESS

405 Chamber of Commerce, DETROIT, MICH.

PEORIA

P. B. & C. C. MILES

Established 1875

Incorporated 1910

PEORIA, ILL.

Handling Grain on Commission
Our Specialty

A. G. TYNG, Jr.

D. D. HALL

TYNG, HALL & CO.Grain and Commission
MerchantsRooms 33 and 35 Chamber of Commerce
PEORIA, ILLINOIS

C. W. Buckley.

Thos. J. Pursley

Buckley, Pursley & Co.

COMMISSION MERCHANTS

GRAIN, HAY AND SEEDS

PEORIA, ILL.

References { First National Bank, Peoria, Ill.
Commercial German National Bank, Peoria, Ill.**W. W. Dewey & Sons**
GRAIN COMMISSION

26 Chamber of Commerce, PEORIA, ILL.

Prompt personal attention given to
Consignments and orders for grain.

T. A. Grier

W. T. Cornelison

T. A. GRIER & CO.Grain Commission
Merchants and ShippersGet best possible results by careful and personal attention
given to all consignments.

Board of Trade

Peoria, Ill.

RUMSEY, MOORE & CO.
GRAIN COMMISSION

Board of Trade Bldg. PEORIA, ILL.

LOUIS MUELLER

L. L. GRUSS

MUELLER GRAIN CO.

RECEIVERS and SHIPPERS

GRAIN

We Solicit Your Consignments of Grain and Hay
ROOM 39 CHAMBER OF COMMERCE
PEORIA, ILLINOISGood Prices and Quick Returns
TRY US**GEO. L. BOWMAN & CO.**

Grain Commission

324 So. Washington Street PEORIA, ILL.

MEMPHIS

J. M. WILLIAMS & CO.

Brokers—Receivers—Shippers

HAY, GRAIN, FLOUR, Etc.

Members National Hay Association,
Memphis Merchants Exchange
Consignments Solicited Quick Returns
Memphis Trust Bldg., MEMPHIS, TENN.

MILWAUKEE

O. MOHR, Mgr.

G. C. HOLSTEIN, Sec'y-Treas.

Mohr-Holstein Commission Co.

29 Chamber of Commerce

MILWAUKEE

Sample Grain a Specialty

BRANCH OFFICES AT CHICAGO AND MINNEAPOLIS

OMAHA

CAVERS ELEVATOR CO.
OMAHAReceivers and Shippers of Grain
SACKED CORN AND OATS

Members: Omaha Grain Exchange Chicago Board of Trade.

ST. LOUIS

**"THE CONSIGNMENT HOUSE
OF ST. LOUIS"**GRAIN, HAY & GRASS SEEDS
Picker & Beardsley Com. Co.
118 NORTH MAIN STREET.

Ship Your Grain, Hay and Seed to

**MARTIN MULLALLY
COMMISSION CO.**

ST. LOUIS, MO.

We never buy. Handle on consignment only.

GOFFE & CARKENER CO.

RECEIVERS

GRAIN, HAY AND SEEDS

106-107 Merchants Exchange

ST. LOUIS

W. C. GOFFE G. S. CARKENER G. C. MARTIN, JR.
K. C., Mo., Office, 101-102 Board of Trade**Toberman, Mackey & Company**

Fastest Growing Commission House in America.

Can handle your Consignments in St. Louis and Kansas City.

GRAIN, HAY AND SEEDS

ST. LOUIS

KANSAS CITY

GRAIN RECEIVERS

CHICAGO

ARMOUR GRAIN CO.

GRAIN DEALERS

CONSIGNMENTS SOLICITED. This department is fully equipped in every way to give the very best service in Chicago.

137 S. La Salle St. CHICAGO

CHICAGO

H. M. PAYNTER

GRAIN COMMISSION

Special attention given consignments of grain and seeds. Orders in futures carefully executed

402-408 Western Union Bldg., Chicago

All business transacted through and confirmed by H. W. Rogers & Bro.

CHICAGO

Gerstenberg & Company

COMMISSION MERCHANTS

Grain Seeds and Mill Feed

Barley a Specialty

305-315 La Salle St., CHICAGO, ILL.

HELLO! HELLO!! HELLO!!!

¶ In order to get the best results from a telephone conversation, you have got to have a good connection. Just so in the handling of your business. ¶ Connect with the firm that is a live wire; that will look after your interests; call for re-inspection when necessary; get good prices; make quick returns and give you liberal treatment. ¶ In other words, make a connection with

ROSENBAUM BROTHERS, 77 Board of Trade, CHICAGO.

¶ Send us your grain to be sold on consignment. ¶ Let us bid for it when you desire to sell to arrive. ¶ You'll make no mistake (either Toledo or Chicago). ¶ Let us hear from you.

PHONE. TELEGRAPH. WRITE.

HENRY H. FREEMAN & CO.

Hay, Straw and Grain COMMISSION MERCHANTS

Correspondence and Consignments Solicited.
Market Reports on Application.

66 Board of Trade CHICAGO, ILL.

HOOPER GRAIN COMPANY

OAT

Shippers

Operate Atlantic and Grand Trunk Western Elevators
CHICAGO

F. E. WINANS & CO.

GRAIN AND FIELD SEEDS COMMISSION MERCHANTS

Barley, Oats, Wheat, Corn, Rye, Timothy, Clover,
Flax, Hungarian Millet

96 BOARD OF TRADE, CHICAGO

Write us freely on all matters pertaining to grain and field seeds. Your questions fully and cheerfully answered; particular attention paid to timothy seed and grain by sample. Consignments and speculative orders receive our careful personal attention.

Nye & Jenks Grain Co.

907-913 Postal Telegraph Bldg.,
Chicago, - Illinois

WM. SIMONS, Pres. and Treas. WARREN T. McCRAY, Vice-Pres.



GEO. L. STEBBINS, Sec'y.

W. A. WERNER
E. E. RICE, Representatives

J. Rosenbaum Grain Co.

(INCORPORATED)

GRAIN MERCHANTS

Chicago
Kansas City Ft. Worth

J. P. GRIFFIN & COMPANY

Grain Commission

79 BOARD OF TRADE

Long Distance Telephone
Harrison 5693

CHICAGO

NORRIS & COMPANY

Grain Merchants

Room 42 Board of Trade CHICAGO
TELEPHONE HARRISON 627

Consignments and Hedging Orders Solicited.
Owners and Operators of the Norris Elevator, Chicago.
Frank W. Hotchkiss, Howard Lipsey, Managers Domestic
Shipping and Receiving Department.



JAMES H. RAWLEIGH
President

ALBERT L. WAYNE
Vice-President and Treasurer

EDWARD ANDREW
Secretary

NASH-WRIGHT GRAIN COMPANY

COMMISSION MERCHANTS

GRAIN AND PROVISIONS

717-720 Postal Telegraph Building, CHICAGO

Long Distance Telephone Harrison 2379

GRAIN RECEIVERS

CHICAGO

GEO. S. DOLE, Pres. H. N. SAGER, Sec.
J. H. DOLE & CO.
 (Established 1832)
 Commission Merchants, Grain and Seeds
 We solicit your
CONSIGNMENTS
 and orders in futures
 226 La Salle Street. - - CHICAGO

E. W. BAILEY & CO.
Commission Merchants
 GRAIN, SEEDS AND PROVISIONS
 72 Board of Trade CHICAGO

EVERYONE HAS A HOBBY
 SO HAVE WE
CONSIGNMENTS
 THAT'S ALL TRY US
M. L. VEON & CO.
 762 INSURANCE EXCHANGE BUILDING, CHICAGO

Hulburd, Warren & Chandler
 Stock Brokers and Commission
 Merchants, Grain and Provisions
 Business solicited in any department
 Receiving, Shipping, Futures
 130 S. La Salle St., CHICAGO



POPE & ECKHARDT CO.
 Commission Merchants
Grain and Seeds

111 West Jackson Street

CHICAGO



RUMSEY & COMPANY
COMMISSION MERCHANTS
 Consignments a Specialty for Forty Years
 80-81 BOARD OF TRADE,
CHICAGO
 I. P. RUMSEY
 HENRY A. RUMSEY

CHICAGO

SOMERS, JONES & CO.
 (INCORPORATED)
COMMISSION MERCHANTS
 GRAIN AND FIELD SEEDS
 CHICAGO MILWAUKEE MINNEAPOLIS
 We are amply prepared to give the best of service on consignments of cash grain and on orders for future delivery.
 Make drafts on us and address all correspondence to us at
 82 Board of Trade, CHICAGO

EXPERIENCED JUDGES OF GRAIN

Consign to
W. S. COWEN COMPANY
 Commission Merchants Grain and Seeds
 815-816 Webster Building
 Robinson Code 327 So. La Salle St., Chicago

PHILIP H. SCHIFFLIN, Pres. EUGENE SCHIFFLIN, Secy.-Treas.
PHILIP H. SCHIFFLIN & CO.
 INCORPORATED

Commission Merchants
 515-518 Postal Telegraph Bldg.
 CHICAGO, ILLINOIS
 Consignments of all kinds of Grain and Field
 Seeds a specialty

We Buy
 Wheat—Corn—Oats—Barley—Rye
 Send Samples
The Quaker Oats Co.
 Cereal Millers
 Grain Dept. 1600 Railway Exchange
 CHICAGO

CHICAGO

W. A. FRASER, Pres. W. A. FRASER, Jr., Vice-Pres.
 R. W. CARDER, Sec. and Treas.
W. A. FRASER CO.
GRAIN COMMISSION
 715 Royal Insurance Bldg., CHICAGO, ILL.
 ST. LOUIS, MO. PEORIA, ILL.
 Tel. Wabash 1252

Lamson Bros. & Co.
 ESTABLISHED 1874
Commission Merchants
 AND
Track Buyers of Grain
 6 Board of Trade CHICAGO
 Ask for Bids Consignments Solicited

J. Herbert Ware Edward F. Leland
CONSIGN
 your Grain and Seeds, and send your
 orders for
 GRAIN, PROVISIONS and STOCKS to
WARE & LELAND
 190 W. JACKSON BOULEVARD
 Royal Insurance Bldg.
 CHICAGO
 Long Distance Phones:
 Wabash 3262 Automatic 51073
 Your Interests Are Our Interests

CRAWFORDSVILLE, Ind.

Crabbs Reynolds Taylor Company
CLOVER SEED
 Car Lot BUYERS of GRAIN
 Crawfordsville Indiana

MINNEAPOLIS

J. L. McCaull, President R. A. DINSMORE, Vice President
 S. J. McCaull, Secretary A. M. DINSMORE, Treasurer
The McCaull-Dinsmore Co.
COMMISSION MERCHANTS
 915-16-17 CHAMBER OF COMMERCE
 MINNEAPOLIS, MINN.
 DULUTH MILWAUKEE OMAHA

GRAIN RECEIVERS

CAIRO

**CHAS. CUNNINGHAM
& SON**

Receivers and Shippers of

**GRAIN,
HAY, etc.****CAIRO, ILLINOIS****Samuel Hastings Co.**

WHOLESALE

GRAIN and HAYSpecial Attention to Ear Corn
and Alfalfa Hay**CAIRO, ILL.****H. S. Antrim
and Company**WHOLESALEGRAIN AND HAY

Members of the Cairo Board of Trade

1101 Commercial Avenue

CAIRO, ILLINOIS**MAGEE GRAIN CO.
CAIRO, ILL.**Request Daily Card
Bids

Sell or Consign Us

**HALLIDAY ELEVATOR COMPANY
CAIRO, ILLINOIS**

Branch Office: 620 Pierce Building, St. Louis, Mo.

WANT

Consignments or to buy direct from

YOU

Either St. Louis or Cairo

YOUR business appreciated

SERVICE UNEXCELLED

FREE To Grain
Investors

The Wagner Letter

is nationally known for its reliable advance information to investors in Grain, Pork, Lard and Ribs. Have it sent you **Free**, with our interesting article "Small Corn Crops and Their History," also latest on Wheat and Provisions. **Keep Accurately Posted—Write Us Today.** Established 26 years. References: All Trade Bureaus.

E. W. WAGNER & CO.

95 Board of Trade, Chicago



J. C. Shaffer & Company
GRAIN MERCHANTS

234 So. La Salle Street, Chicago

ELEVATOR CAPACITY: 4,500,000 BUSHELS

PEORIA, ILL.

ST. LOUIS, MO.

Want Service? We Have It!

We buy or sell grain receive
on consignment, execute
future orders, and deal in all
off-grade grains especially.

Oat Clips
Elevator Dust

Barley Chaff
Malt Sprouts

W. A. Fraser Co.

715 Royal Insurance Bldg.

CHICAGO

ARMOUR Grain Co.

GRAIN DEALERS

CONSIGNMENTS SOLICITED

This department is fully equipped
in every way to give the very best
service in Chicago.

137 South La Salle St., CHICAGO

J. Herbert Ware

Edward F. Leland

Ware & Leland

Grain—Stocks—Bonds

Bank Floor, Royal Insurance Building
160 West Jackson Boulevard

MEMBERS

New York Stock Exchange

Chicago Board of Trade

Chicago Stock Exchange

CONSIGNMENTS SOLICITED

Private Wires

'Phones } Wabash 3262
 } Auto. 51-073

RECEIVING COMMISSION MERCHANTS

Pope & Eckhardt Co.
Grain & Seeds
Chicago

Integrity, Responsibility and Personal Attention Guarantee
best results for you on your consignments, or sales to arrive

W. M. RICHARDSON

Richardson Bros.

RECEIVERS AND SHIPPERS

Flour, Grain and Mill Feeds

Bourse Building, - - PHILADELPHIA, PA.

MARSHALL HALL, President
E. L. WAGGONER, Vice-President

W. J. RAVOLD, Secretary
J. T. ARTHUR, Treasurer

W. L. GREEN COMMISSION COMPANY

Receivers, Shippers, Exporters
Wheat, Corn, Oats, Kaffir Corn, Feed Wheat

Milling Wheat a Specialty

St. Louis,

Missouri

Toberman, Mackey & Company

Fastest Growing Commission House in America

Can handle your Consignments in St. Louis and Kansas City

Receivers and Shippers of

GRAIN, HAY AND SEEDS

ST. LOUIS

KANSAS CITY

WE SPECIALIZE IN

High Grade Oats

When you have any choice grades to sell, quote us.

If you would buy the best, write us.

The TWO BEST GRADES OF OATS to be had
are our PRIVATE BRANDS in printed bags, viz.:

"DUDLEY"

CHOICE NO. 2 WHITE
CLIPPED OATS

and

"JONES' PRIDE"

SELECTED NATURAL
NO. 2 WHITE OATS

CHAS. D. JONES & CO.

NASHVILLE, TENN.

NOT A BILL OF EXPENSE BUT A SOURCE OF REVENUE

Enables
Shippers
to
Collect
Claims
—
Requires
No
Repairs
—
Occupies
Small
Space
—
Most
Economical
to
Install



PORTABLE BAGGER

Write for Catalog.

No Bother
to
Operate
—
Never
Gets Out
of
Order
—
Will Not
Rust
or
Wear Out
—
60 Days'
Trial

National Automatic Scale Co.
West Pullman, Chicago, Illinois

The Chief Grain Inspector
of Illinois says that the
Official Brown-Duvel Moisture Tester
is the best machine of its kind made.

Read Mr. John P. Gibbons' Letter

JOHN P. GIBBONS

Chief Inspector of Grain for the State of Illinois.

Chicago, Aug. 25, 1913.

SEED TRADE REPORTING BUREAU
Chicago, Ill.

Gentlemen:—

I write you in reference to the Official Brown-Duvel Moisture Tester, which this Department has been using for the past 7 months. We have used these machines constantly, and always found them to be in good working order.

I think they are the best Machines of their kind in the country, and am talking from experience. The tests we have made with them have always been very satisfactory.

For any further information regarding these Machines, write me at any time.

Very truly yours,

(Signed) JOHN P. GIBBONS.
Chief Grain Inspector.

The Official Brown-Duvel Moisture Tester is used by all State Grain Inspection Departments, is endorsed and used by the U. S. Government, employed at all principal corn markets, and over 300 country elevators in Iowa alone. Also large sales in other states.

It is the most accurate, simplest, safest, satisfactory, quickest and most inexpensive moisture tester manufactured. It contains several new features. Write today for Catalog No. 10A and prices.

SEED TRADE REPORTING BUREAU
Dept. A. 627 Postal Telegraph Bldg. CHICAGO

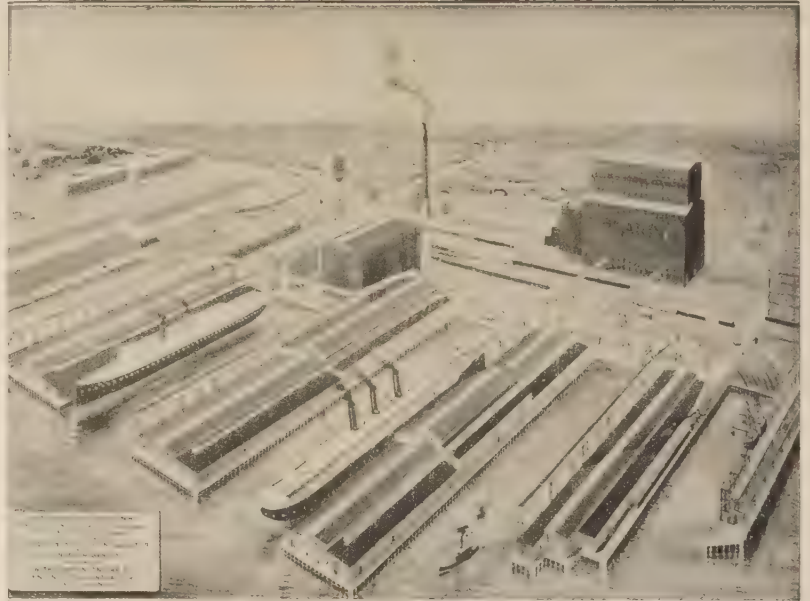
**Transfer Elevators
Terminal Elevators
Country Elevators**



Concrete Fireproof Grain Elevator built for the Crabbs-Reynolds-Taylor Co.
at Wingate, Ind. Capacity 60,000 Bushels.

Macdonald Engineering Co.
Monadnock Building, CHICAGO, ILL.

Fireproof Grain Elevators



East Boston Terminal, Boston & Albany Railroad,
New York Central & Hudson River Railroad Co., Lessees

Designs and estimates promptly furnished
for all kinds of buildings for the handling
and storage of grain in any locality.

Witherspoon-Englar Company
1244-1250 Monadnock Building, Chicago, Ill.

John S. Metcalf Co.

Builders of

Terminal Elevators

Concrete Storage Bins

Transfer Elevators

Drawings and Specifications

THE TEMPLE, CHICAGO

Elevator Machinery and Supplies

**FLOUR and FEED MILL MACHINERY
STEAM and GAS ENGINES**

Pulleys, Shafting, General Power Transmission
Machinery, Roll Grinding and Corrugating

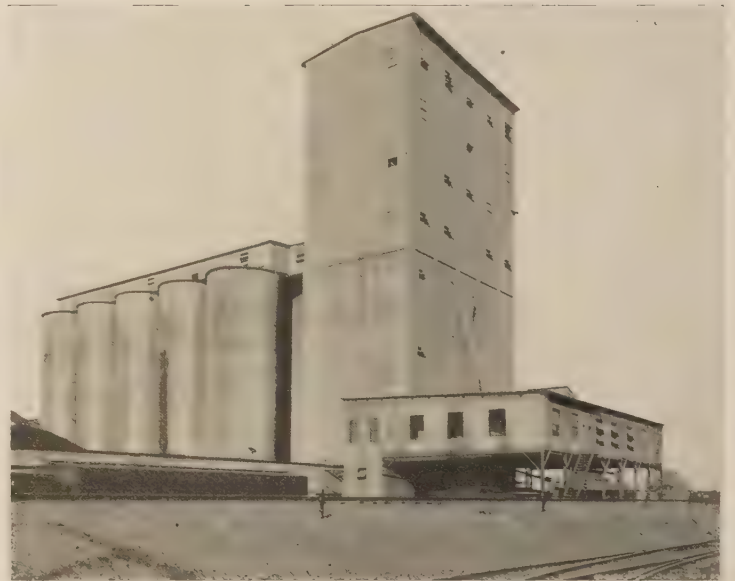
Largest Factory and Stock in Western Country

SEND FOR 450-PAGE CATALOG

GREAT WESTERN MFG. CO.

General Office and Factory
LEAVENWORTH, KAN.

Warehouse and Salesroom
1221-1223 Union Ave.
KANSAS CITY, MO.



Reinforced Concrete Elevator of the
Northwestern Malt & Grain Co., Chicago
Capacity 650,000 Bushels

The Stephens Engineering Company
Engineers and Contractors

Monadnock Bldg.

CHICAGO, ILL.



Elevator Design and Elevator Building



**Is an Art
When Done by Artists**

Our Artists are at your command.

If we cannot convince you that we are the Word in Elevator design and Construction, we do not want your patronage.

We have built over 400 elevators **large** and **small** and we are now building at the rate of 50 to 60 per year.

We have the men (Artists).

We have the equipment.

We render the service.

Burrell Engineering & Construction Co.

1102-1108 Webster Building
CHICAGO

404 Iowa Loan & Trust Bldg., Des Moines, Iowa

302 Castle Hall, Indianapolis, Ind.

827 Chamber of Commerce, Detroit, Mich.

Fort William, Ontario

JAMES STEWART & CO. GRAIN ELEVATOR DEPARTMENT

1507-1523 Westminster Building
W. R. SINKS, Manager

CHICAGO

R. H. FOLWELL, Engineer



Grand Trunk Pacific Railway Co. Elevator at Fort William, Ont.
Capacity 3,500,000 Bushels.

**We Build Grain Elevators, Any Type of
Construction, in Any Part of the World**

Also General Contractors with Offices in the Following Cities,
Wire, Write or Call Personally.

NEW YORK, Hudson Terminal Building
PITTSBURG, PA., Westinghouse Building
SAN FRANCISCO, CAL., 709 Mission Street
CANADIAN STEWART CO., Limited, Montreal Can., Eastern Townships Bank Building
ST. LOUIS, Bank of Commerce Building
NEW ORLEANS, LA., Hibernia Bank Building
DENVER COLO., 1st National Bank Building
FORT WILLIAM, Ontario, Canada

H. Phone M 8037

HEIDENREICH

**Concrete
Grain
Tanks**

U. S. Patent
667,172

One Hundred Million Bushels
Capacity in use today.

Plans, Specifications, Supervision.
E. LEE HEIDENREICH
Elevator Builder
Dwight Bldg. Kansas City, Mo.

GRAIN ELEVATORS

built from our designs and by our force of workmen
are strong, substantial and economical in operation.

WOOD OR FIREPROOF

T. E. IBBERSON

ELEVATOR BUILDER

Corn Exchange Building

Minneapolis, Minn.

THE destructive acid formed
by grain dust and rain
water is successfully resisted by
the inert pigments in

DIXON'S SILICA-GRAPHITE PAINT

Letter No. 17-B from a promi-
nent elevator company on request
JOSEPH DIXON CRUCIBLE CO.
Jersey City, N. J.



The Barnett & Record Company GENERAL CONTRACTORS

Designers and Builders of

Grain Elevators, Flour Mills and Heavy Structures

Reinforced Concrete and Steel Ore Dock under con-
struction at Superior, Wisconsin, for the Allouez
Bay Dock Company. Entirely Fireproof.

Write for designs and Estimates

OFFICES:

Minneapolis, Minn.

Duluth, Minn.

Fort William, Ontario

Grain Storage Tanks and Grain Elevators



Prospective builders of Grain Elevators or Grain Storage Tanks should examine the type of elevators we are building all through the Western and Northwestern States. They are absolute insurance against fire and combine points that make them the most economical elevator construction that can be had today.

We are equipped to furnish steel and machinery with prompt service and our facilities are unequalled for this kind of work.



Minneapolis Steel & Machinery Co.

MINNEAPOLIS, MINN.

Denver, Colo. El Paso, Tex.
Spokane, Wash. Butte, Mont.
Salt Lake City, Utah

Elevator, Feed Mill and Warehouse recently completed for E.W. Conklin & Son, at Binghamton, N. Y.



Fireproof Construction Elevators, Mills and Warehouses. We prepare plans and make lump-sum price for the complete work.

MONARCH ENGINEERING CO.

Chamber of Commerce

BUFFALO, N. Y.

Reliance Construction Company

Furnish Plans, Estimates and Build
COUNTRY GRAIN ELEVATORS

Our long experience as a builder of elevators insures you an up-to-date house. Write today.

625 Board of Trade Building,

INDIANAPOLIS, IND.

The Corn Exchange National Bank

OF CHICAGO

Capital	-	-	\$3,000,000.00
Surplus	-	-	5,000,000.00
Undivided Profits	-	-	1,000,000.00

OFFICERS

ERNEST A. HAMILL.....President	FRANK W. SMITH.....Secretary
CHARLES L. HUTCHINSON, Vice-Prest.	J. EDWARD MAASS.....Cashier
CHAUNCEY J. BLAIR.....Vice-President	JAMES G. WAKEFIELD...Asst. Cashier
D. A. MOULTON.....Vice-President	LEWIS E. GARY.....Asst. Cashier
B. C. SAMMONS.....Vice-President	EDW. F. SCHOENECK...Asst. Cashier

DIRECTORS

CHARLES H. WACKER	CLYDE M. CARR
MARTIN A. RYERSON	WATSON F. BLAIR
CHAUNCEY J. BLAIR	EDWIN G. FOREMAN
EDWARD B. BUTLER	CHARLES L. HUTCHINSON
CHARLES H. HULBURD	EDWARD A. SHEDD
CLARENCE BUCKINGHAM	FREDERICK W. CROSBY
BENJAMIN CARPENTER	ERNEST A. HAMILL

UNITED STATES DEPOSITARY

Foreign Exchange

Cable Transfers

Letters of Credit

Accounts of grain elevator operators and commission men throughout the country respectfully solicited

SEE THAT YOUR
CONTRACT CALLS FOR



THE CUTLER STEAM DRYER

SOLD BY ALL MILL FURNISHERS

Not an Experiment. In successful use 30 years drying
CORN MEAL, HOMINY,
BREWERS' GRITS AND MEAL,
AND ALL CEREAL PRODUCTS.

ALSO SAND, COAL DUST, GRAPHITE, CLAY, ORES, ETC.

Automatic in operation, requiring no attention.

THE CUTLER CO., North Wilbraham, Mass.
CATALOG ON REQUEST

"MONARCH" BALL BEARING

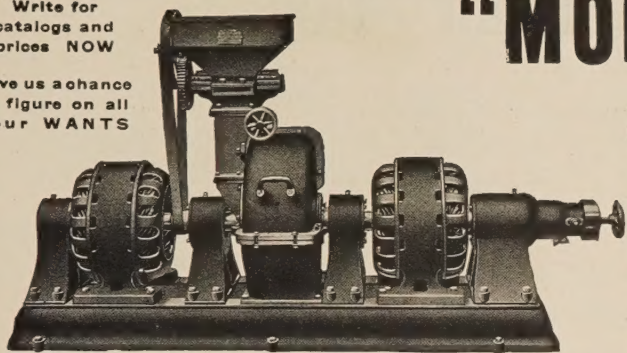
FEED GRINDERS WILL ALWAYS

→ **SOLVE ALL YOUR TROUBLES** ←

A POSITIVE SAVING of 25% or More in POWER

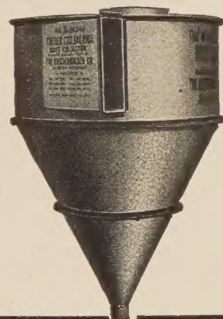
DON'T FORGET DIRECT CONNECTED ELECTRICALLY MOTOR DRIVEN
Ball Bearing Feed Grinders and
Corn Crackers OUR SPECIALTY

You cannot afford to operate your plant without one of these "Monarch" Mills, because of the large amount of power saved, or the tremendous increase in capacity, that you will obtain with your present power. Guaranteed never to get out of TRAM. TRY ONE OF THESE MILLS NOW, if you want Increased Profits.

Write for
catalogs and
prices NOWGive us a chance
to figure on all
your WANTSMONARCH BALL BEARING, DIRECT
MOTOR DRIVEN ATTRITION MILLWe manufacture the Largest, Most
Improved, and Most Complete Line of
Machinery for Flour and Feed Mills,
Grain Elevators, etc., in the World.**SPROUT, WALDRON & CO.,** THE MILL P. O. BOX
BUILDERS 320 **Muncy, Pa.**WESTERN OFFICE: 9 S. CLINTON ST., CHICAGO, ILL. REPRESENTATIVES and BRANCH OFFICES
Sales Department, AT ALL PROMINENT POINTS**Are Your Freight Rates Satisfactory?**Did it ever occur to you that your competitors
in many instances have rates that are predi-
cated upon a more reasonable basis due entirely
to the aggressiveness of expert traffic men?We have in our employ men who thoroughly
understand these vexatious traffic problems and
are prepared to assist you in every possible
manner.**Results Produced or No Charge****GENERAL TRAFFIC ASSOCIATION, Inc.**

715 14th Street, N. W.,

Washington, D. C.

**DUST! DUST! GIBBS****DUST PROTECTOR** is inval-

uable to operatives in every

industry where dust is trou-

blesome. It has been thor-

oughly tested for many years

in every kind of dust, and is

the most reliable protector

known. Perfect Ventilation.

Nickel-plated protector, \$1.

postpaid. Circular free.

Agents wanted. **GIBBS RESPIRATOR CO.**
"B" 124 East Ave., Oak Park (Chicago), Ill.**The Difference**

in the

Construction of its "Inwards"
Eliminates Three-quarters
of the Internal Friction.**THAT SAVES POWER****The New "1905"
Cyclone
Dust Collector**

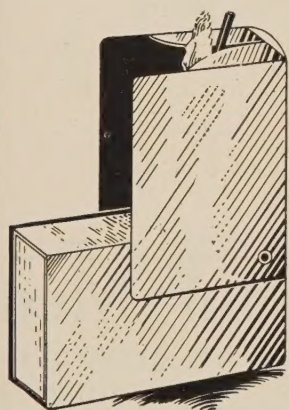
INVESTIGATE

Write for Our
Dust Collector Catalog**The Knickerbocker Co.**
Jackson, Michigan**Robinson Telegraphic Cipher
Revised Edition**Cloth Binding \$1.50
Leather Binding 2.00**Mitchell Brothers Publishing Co.**
431 S. Dearborn St., Chicago**MILLERS' MUTUAL FIRE
INSURANCE ASSOCIATION
OF ILLINOIS**

Established 1878. Alton, Illinois

Insurance on Flour Mills and Elevator
Properties.Grain Insurance for short terms a
Specialty.

CASH ASSETS - \$473,253.91

G. A. McKINNEY, Sec'yWestern Department: Rollie Watson, Mgr.
402 Sedgwick Bldg. Wichita, Kansas**Elwood's
Grain Tables**Show the value of any num-
ber of bushels or pounds of
Wheat, Rye, Oats, Corn or
Barley at any given price
from 10 cents to \$2.00 per
bushel. One of the most use-
ful books ever offered to mil-
lers. Endorsed by prominent
millers and grain dealers.
Bound in cloth, 200 pages.
Mailed on receipt of price**\$1.25****Mitchell Brothers
Publishing Co.**431 S. Dearborn St.,
CHICAGO

SHUR-LITE

**ADVERTISING
NOVELTIES**FOR CONVENTIONS AND HOLIDAY GIFTS
**WILL HOLD YOUR TRADE
WILL BRING YOU NEW**

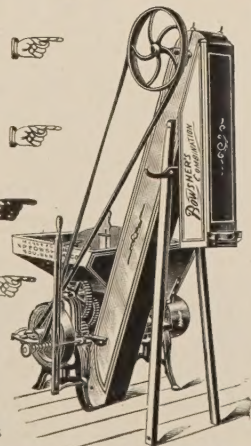
Write for an Assortment. Look them over.

Leather Goods, Pencils, Match Safes, Pocket
Knives, Etc. Tell us how many you want and
the price. We have 3,000 articles to select from.**SHUR-LITE** THE NEW SAFETY MATCH BOX
that protects the light in any
wind. Sample for 20c. Ask for quantity prices.**ALSCHULER**

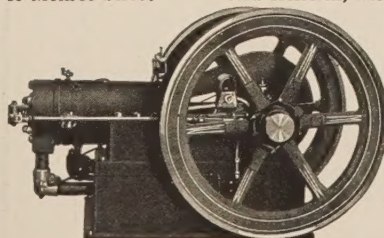
613 Schiller Building, CHICAGO

They All Point to the BowsherA mill that will crush or grind ear corn (with or with-
out shucks), Kaffir in the head and all kinds of
small grain.A mill that has conical shaped grinders—which do
the work close to the center of the shaft, thus ef-
fecting a great saving of power.A mill that can run empty without injury, as the
grinders will not strike together.A model feed mill, light running and handy to oper-
ate; different from all others. A complete inde-
pendent outfit.These are a few of the many reasons why the Bowsher
is the mill for you.

Sold with or without elevator. 10 sizes, 2 to 25 H. P.

N. P. Bowsher Co., South Bend, Indiana**THE LAUSON****KEROSENE ENGINES** cut your Fuel Bills in Two
Famous for great Fuel Economy, with
Maximum Power Production, owing to
Special Features and Design.The Sumter Built-in, Gear-Driven Mag-
neto and no Batteries save you Money
Built in all sizes

Write for our large catalog before buying

THE JOHN LAUSON MFG. CO.
59 Monroe Street New Holstein, Wis.

Leading Grain Receivers in all Markets

ATLANTA, GA.
Dunn, W. P., wholesale brokerage and commission, flour, grain, hay, mill feeds, cottonseed meal and hulls.*
Joseph Gregg & Son, grain and hay brokers.*†

AUGUSTA, GA.
Willet Seed Co., N. L., seeds.

BALTIMORE, MD.
England & Co., Chas., grain and hay receivers.*†
Hax & Co., G. A., grain and hay receivers.*†

BLOOMINGTON, ILL.
Baldwin Grain Co., brokers.
Hasenwinkle Grain Co., grain commission merchants.
O'Neill & Gyles, grain brokers.
Slick & Co., L. E., grain receivers and shippers.

BUFFALO, N. Y.
Buffalo Cereal Co., grain.
Burns Grain Company, grain commission.
Churchill Grain & Seed Co., grain and seeds.*
Harold, A. W., grain merchant.

CAIRO, ILL.
Antrim & Co., H. S., receivers and shippers.*
Cunningham & Son, Chas., hay, grain.
Halliday Elevator Co., corn, oats.*
Hastings Co., Sam'l., receivers and shippers.†
Magee Grain Co., grain.*

CHAMPAIGN, ILL.
Sledge, J. P., grain broker.*

CHICAGO, ILL.
Armour Grain Co., grain buyers.*
Bailey & Co., E. W., commission merchants.*
Cowen Co., W. S., commission merchants.
Delaney, Frank J., grain commission.
Dickinson Co., Albert, seeds.
Dole & Co., J. H., commission merchants.*
Fraser Co., W. A., grain commission.*
Freeman & Co., Henry H., hay, straw and grain.*†
Gerstenberg & Co., grain and seeds.*
Griffin & Company, J. P., grain commission.
Hoit & Co., Lowell, commission grain and seeds.
Hooper Grain Co., receivers and shippers.*
Hulburd, Warren & Chandler, com. merchants.
Illinois Seed Co., seed merchants.
Lamson Bros. & Co., commission merchants.*
McKenna & Rodgers, commission merchants.*
Albert Miller & Co., hay and produce.†
Norris & Co., grain merchants.*
Nye & Jenks Grain Co., commission merchants.*
Paynter, H. M., grain commission.
Pope & Eckhardt Co., grain and seeds.*
Rosenbaum Brothers, receivers and shippers.*†
Rosenbaum Grain Co., J., receivers and shippers.
Rumsey & Co., commission merchants.*
Sawers Grain Co., grain commission.*
Schiffin & Co., Philip H., commission merchants.*
Shaffer & Co., J. C., grain shippers.*
Somers, Jones & Co., commission merchants.*
Van Ness, Gardiner B., grain commission.*
Zehon & Co., M. L., commission merchants.
Wagner & Co., E. W., receivers and shippers.*
Ware & Leland, grain and seeds.*
Winans & Co., F. E., grain and field seeds.

CINCINNATI, OHIO.
Allen & Munson, grain, hay, flour.*
Fitzgerald Bros. Co., hay and grain commission.*
Van Leunen & Co., Paul, consignments.*

CLEVELAND, OHIO.
Bennett, W. A., hay, grain, mill feed.*†

COLUMBUS, OHIO.
McAlister, Jas. P., & Co., shippers grain and hay.

CRAWFORDSVILLE, IND.
Crabbs-Reynolds-Taylor Co., grain and seeds.*†

CROWLEY, LA.
Lawrence Brothers Co., Ltd., grain, nutriline feed.

DES MOINES, IOWA.
Lockwood Grain Co., B. A., flour and grain dealers.*

DECATUR, ILL.
Baldwin & Co., H. I., grain brokers.*

DETROIT, MICH.
Dumont, Roberts & Co., receivers and shippers.*
McLane, Swift & Co., grain merchants.*

FORT WAYNE, IND.
Bash & Co., S., grain and seeds.
Egley-Doan Elevator Co., grain, seeds, hay.*†
Niezer & Co., grain, hay, straw, seeds, coal.*†

FOSTORIA, OHIO.
Fostoria Grain Co., receivers and shippers.*

HARRISBURG, PA.
Harrisburg Feed and Grain Co., grain and feed.†

INDIANAPOLIS, IND.
Boyd, Bert A., grain commission.*
Kendrick & Sloan, hay and grain.
Merchants Hay & Grain Co., hay and grain.
Mutual Grain Co., grain commission.*
Shotwell & Co., C. A., hay, grain, feed, flour.
Witt, Frank A., grain commission and brokerage.

KANSAS CITY, MO.
Thresher-Fuller Grain Co., grain commission.*

LANCASTER, PA.
Eby & Son, Jonas F., receivers and shippers.†

LOUISVILLE, KY.
Callahan & Sons, receivers and shippers.*
Thomson & Co., W. A., receivers and shippers.

MEMPHIS, TENN.
Williams & Co., J. M., brokers, receivers, shippers.†

MILWAUKEE, WIS.
Bartlett & Son Co., L., grain commission.*
Bell & Co., W. M., commission merchants.*
Courteen Seed Co., seeds.
Donahue-Stratton Co., buyers and shippers.*
Mohr-Holstein Commission Co., grain commission.
Rialto Elevator Co., grain receivers and shippers.

MINNEAPOLIS, MINN.
McCaull-Dinsmore Co., commission merchants.*
Quinn, Shepherdson Co., grain commission.*

NASHVILLE, TENN.
Jones & Co., Chas. D., receivers and shippers.*

NEW CASTLE, PA.
Hamilton, C. T., hay, straw, grain, millfeed, produce.†

NEW YORK, N. Y.
Brooklyn Hay & Grain Co., hay, straw and grain.†
Forbell & Co., L. W., commission merchants.*†
Keusch & Schwartz Co., grain commission.*

NORFOLK, VA.
Cofer & Co., Inc., J. H., grain.*
Cofer, Vernon L., hay, grain, feed.*†
LeGrand & Burton, grain and hay brokers.†
Reed & Bro., Inc., D. P., hay, grain, mill feeds.*

OMAHA, NEB.
Cavers Elevator Co., receivers and shippers.*

PEORIA, ILL.
Bowman & Co., Geo. L., grain commission.
Buckley, Pursley & Co., commission merchants.*
Dewey & Sons, W. W., grain commission.
Feltman, C. H., grain commission.†
Grier & Co., T. A., grain commission.
Miles, P. B. & C. C., grain commission.*†
Mueller Grain Co., receivers and shippers.†
Rumsey, Moore & Co., grain commission.*
Tyng, Hall & Co., grain commission.*

PHILADELPHIA, PA.
Delp Grain Co., E. E., grain and feeds.*†
Lemont & Son, E. K., hay, grain, mill feeds.*†
Miller & Sons, L. F., receivers and shippers.*†
Richardson Bros., grain, flour, mill feeds.*

PITTSBURGH, PA.
Heck & Co., W. F., receivers and shippers.*†
McCaffrey's Sons Co., Daniel, grain and hay.*†
McCague, R. S., grain and hay.*†
Morgan, H. G., hay and grain.†
Smith & Co., J. W., grain, hay, feed.*†
Stewart & Geidel, D. G., grain, hay and feed.†
Walton Co., Sam'l., hay, grain, mill feeds.*†

RICHMOND, VA.
Adams Grain & Provision Co., receivers, shippers, exporters.*†
Beveridge & Co., S. T., grain, hay, feed, seeds.*†
Richardson, Jr., Co., Inc., W. F., grain and feeds.*

SALT LAKE CITY, UTAH.
Smurthwaite Grain & Milling Co., C. A., grain, flour, hay, seeds.

ST. LOUIS, MO.
Goffe & Carkener Co., receivers, grain, hay, seeds.*†
Green Commission Co., W. L., receivers, shippers, exporters.*
Mullally Commission Co., Martin, com. merchants.*†
Picker & Beardsley Com. Co., grain, hay and seeds.*†
Prunty, Chas. E., grain and seeds.
Toberman, Mackey & Co., grain, hay and seeds.†

TOLEDO, OHIO.
Devore & Co., H. W., grain dealers.
The Goemann Grain Company, grain merchants.*†
King & Co., C. A., grain and seeds.*
Paddock-Hodge Co., receivers and shippers.*
Raddatz & Co., H. D., grain and seeds.
Rundell Co., W. A., grain and seeds.*
Southworth & Co., grain and seeds.*†
Wickenhiser & Co., John, grain dealers.
Zahn & Co., J. F., grain and seeds.*

*Members Grain Dealers' National Association.

†Members National Hay Association.

UNIVERSAL GRAIN CODE

(and Mill Feed Supplement)
COMPILED FOR USE OF

GRAIN and MILLING TRADES

OF THE

United States and Canada

This Code meets the present day requirements of the grain and milling trades—is up-to-date in every respect and thoroughly covers the changes in methods and business that have come into use of late years.

The translation expressions and tabulated matter is a great improvement upon any public grain and milling code now in use, and is an assured factor in saving tele-

graph tolls and misunderstandings in telegraphing.

The Universal Grain Code is being used by many hundreds of the most active firms in the country.

A list of Code Users is sent gratis with every copy of the Universal Grain Code, the names and addresses being published free of charge.

Send for a Copy Now. Price \$3.00.

MITCHELL BROTHERS PUBLISHING CO.

431 S. Dearborn Street

CHICAGO, ILL.

Progressive Grain Men

Are interested in all phases of the grain business, the milling as well as the marketing of grain. They aim to keep in touch with the consuming trade and know what becomes of their grain in the markets of the world. Such men find the

AMERICAN MILLER

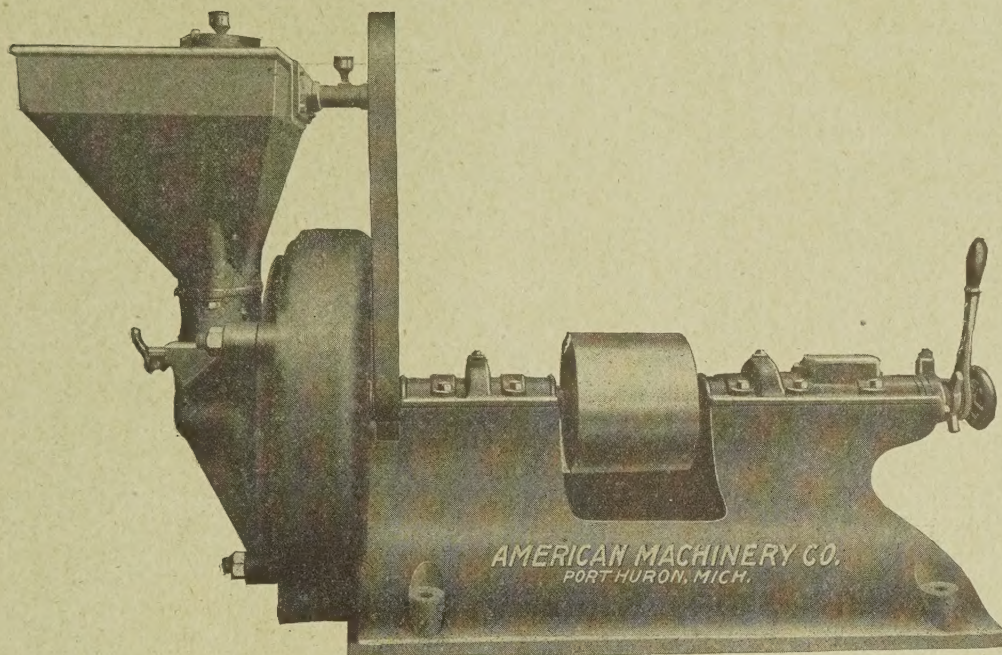
a big help because it fully covers the business of milling wheat and other cereals.

Published on the first of each month, it gives all the news of the milling world and prints a large amount of technical matter that is of interest to the elevator man as well as the miller.

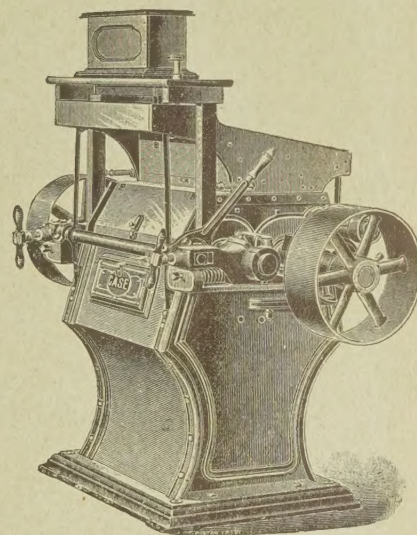
We will send the American Elevator and Grain Trade and American Miller to one address for one year at the combination price of \$2.50. Send in your subscription now.

October 15, 1913.

THE AMERICAN ELEVATOR AND GRAIN TRADE

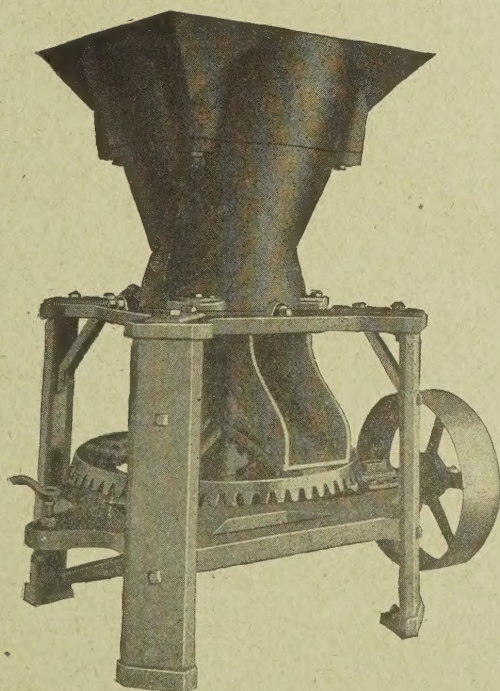


The latest improved self-tramming, disc-oiling American Special Grinder. PLATES ALWAYS IN TRAM. Vertical force feed.

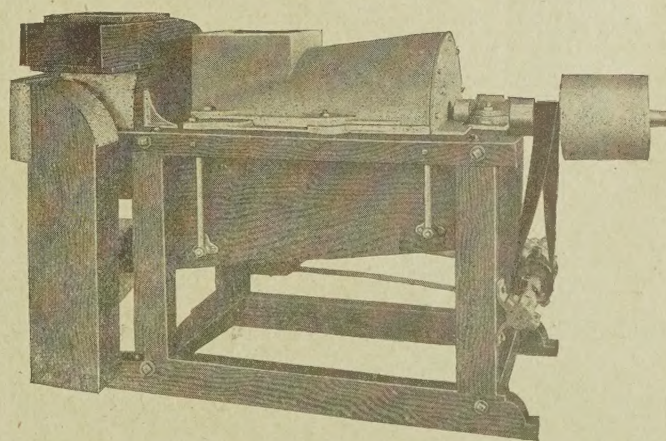


(Patented and patents pending)

The American Improved Case Oat Crimper and Corn Cracker.



The American Extra Heavy 4-break Cob Crusher.



The American heavy-duty large-capacity Corn Sheller.

THE AMERICAN MACHINERY CO.

PORT HURON, MICHIGAN

Your Fathers, Uncles,
Older Brothers and
Maybe YOU

have seen our ads
of and used

The **CHARTER**

for considerably over a
Quarter of a Century

Because It Was

The **PIONEER OIL ENGINE of the WORLD**

Started at the Head and Remained There

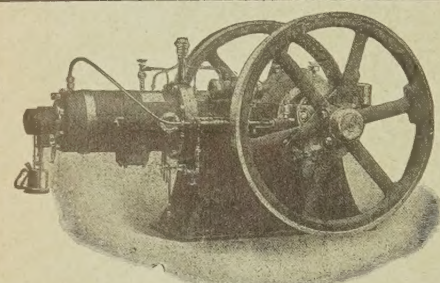
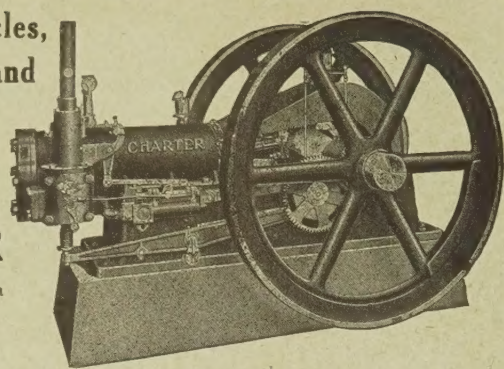
Built in All Combinations—Most Complete Line Made

Stationaries; Portables; Semi-Portables; Hoisters; Pumping; Sawing, Dynamo and Boat Outfits

Kerosene, Fuel Oils, Distillate, Gasoline, Gas, Alcohol
The **CHARTER** Type "R"—"The Latest Word"

Send for Catalog and Say How We Can Serve You

400 LOCUST STREET **CHARTER GAS ENGINE CO.,** STERLING, ILLINOIS



It Costs 5c an Hour

to operate a 25 H. P. Muncie
Oil Engine, other sizes in pro-
portion.

Uses Crude Oil, Fuel Oil,
Gas Oil, Solar Oil, Kerosene
or Distillate.

But two mechanically oper-
ated attachments. Powerful,
Simple, Automatic and Dur-
able. Write us.

MUNCIE OIL ENGINE CO.

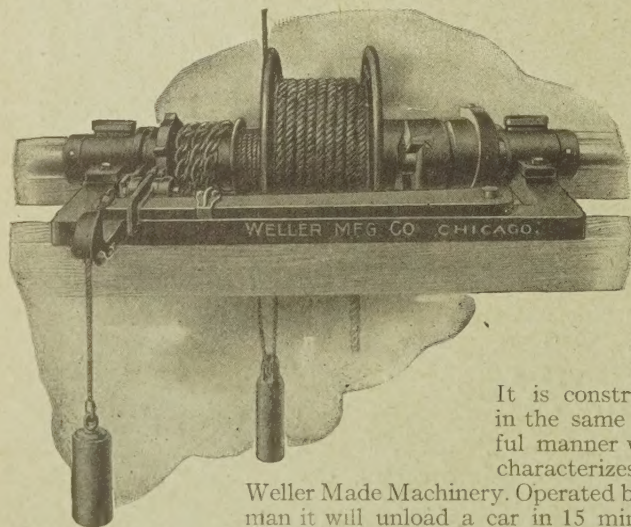
Liberty Street

MUNCIE, IND

WELLER—MADE

Weller Machinery
stands for absolute satisfaction

Below we illustrate a single Clark Automatic Power Shovel, well
known for its efficiency and time saving features.



It is constructed
in the same care-
ful manner which
characterizes all

Weller Made Machinery. Operated by one
man it will unload a car in 15 minutes.

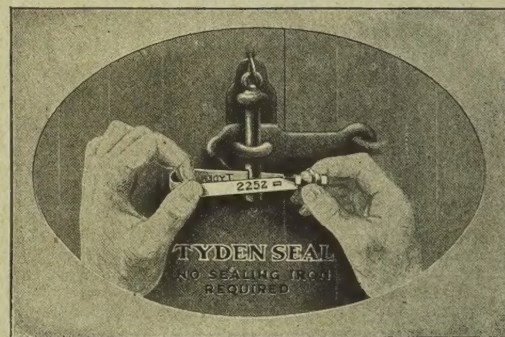
Write for our No. 20 catalogue, describing and illustrating all kinds
of Weller machinery for use in Elevators and Mills.

Weller Mfg. Co., = Chicago
NEW YORK OFFICE: 50 Church Street.

WEBSTER CHAIN BELTING



**Tyden Car
Seals
Prevent
Losses and
Claims**



Self-locking, Safe, Secure. Adopted by U. S. Government and Lead-
ing Railroads. Your name on each seal. Millions used by shippers.
WRITE FOR SAMPLES.

INTERNATIONAL SEAL & LOCK CO.

CHICAGO OFFICE: 619 Railway Exchange

No More Dust

If your elevator is
equipped with the

Day Dust Collector

Storm Proof—Spark Proof

In use in all best elevators.

Write

THE DAY COMPANY

38 So. 12th Street
MINNEAPOLIS, MINN.

